

NATURAL GAS POLICY OUTLOOK: BOLD PREDICTIONS, POLICY SCENARIOS AND LOOSE ENDS

PRESENTATION TO THE AMERICAN GAS ASSOCIATION`

SEPTEMBER 22, 2010

**Kevin Book, Managing Director, Research

*** Please refer to the risks and disclosures on the second page of this document.*

RISKS AND DISCLOSURES

Risks

Legislative, regulatory and diplomatic agendas are subject to change.

Analyst Certifications

I hereby certify that the views expressed in this presentation accurately reflect my personal views as of the date of this presentation. I further certify that no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views contained in this presentation.

By: Kevin D. E. Book

Disclosures

The opinions, forecasts, recommendations, projections and interpretations of macro events contained in this report are those of the analysts preparing this report and are based upon information available to them as of the publication date of this report.

The analysts preparing this report based the opinions, forecasts, recommendations, projections and interpretations of macro events contained herein on sources they believe to be accurate and reliable, but completeness and/or accuracy is neither implied nor guaranteed.

The opinions, forecasts, recommendations projections and interpretations of macro events contained herein are subject to change without notice.

The analysts preparing this report are not registered lobbyists and do not advocate or lobby for any particular policy action on behalf of clients.

Although this report may mention specific companies by name and/or specific industries and industry sectors, this report was not prepared, is not intended and should not be interpreted as a research report regarding the equity securities of any company.

(c) 2010 ClearView Energy Partners, LLC.

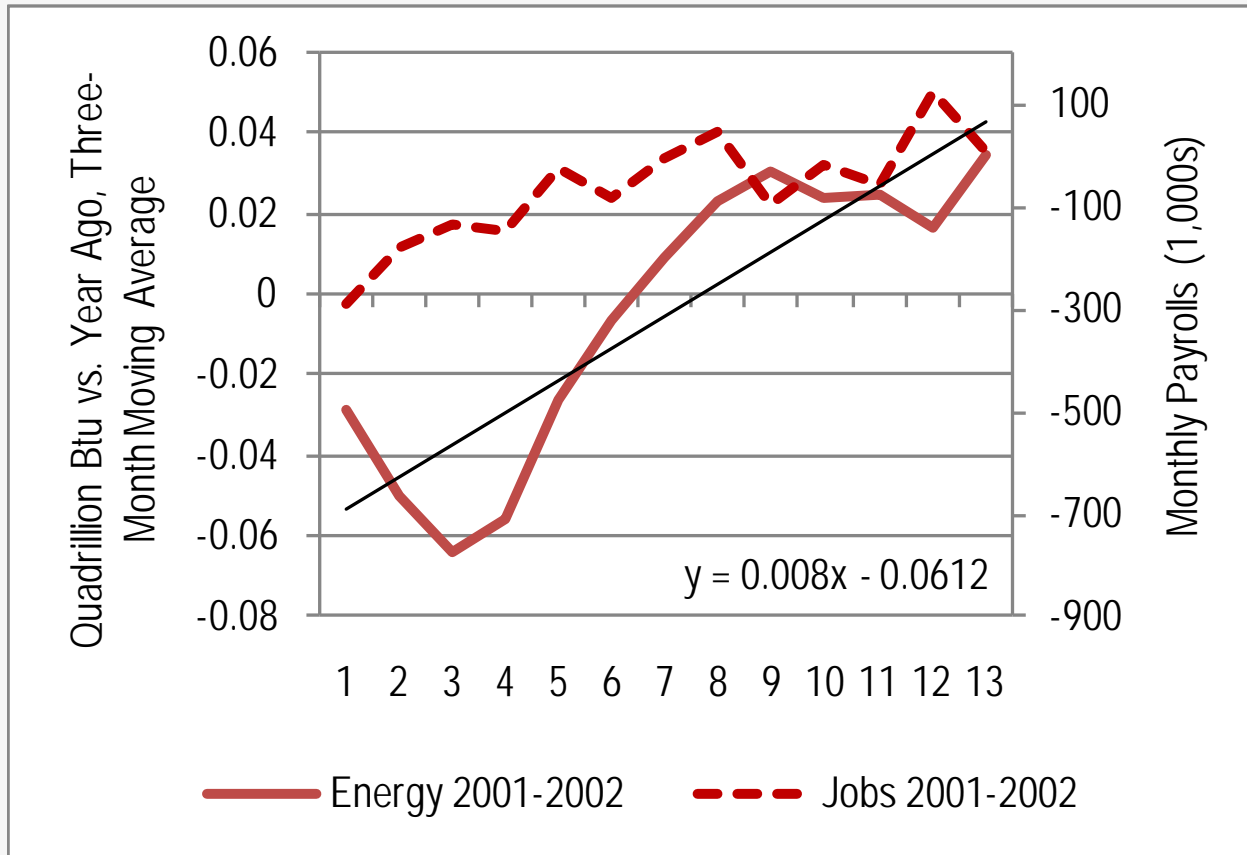
Any reproduction or distribution of this report, in full, or in part, without the prior written consent of ClearView Energy Partners, LLC is prohibited.

NATURAL GAS POLICY LANDSCAPE: SUPPLY, DEMAND AND PRICE

- **Where We Are**
 - The “Fuel Fight”
 - The Zone of No Accountability
 - The Moratorium ... and Risk That Washes Ashore
 - After “Big Climate”
- **What to Watch**
 - **Likely:** Tax policy reforms
 - **Likely:** Limited GOM throughput
 - **Possible:** Fracking policy changes: Pavilion and Pennsylvania
 - **Improbable:** Sweeping “spill policy”
 - **Next year:** Emissions Policy at the Core

SURPLUS SUPPLY + DEMAND DEFICIT = FUEL FIGHT

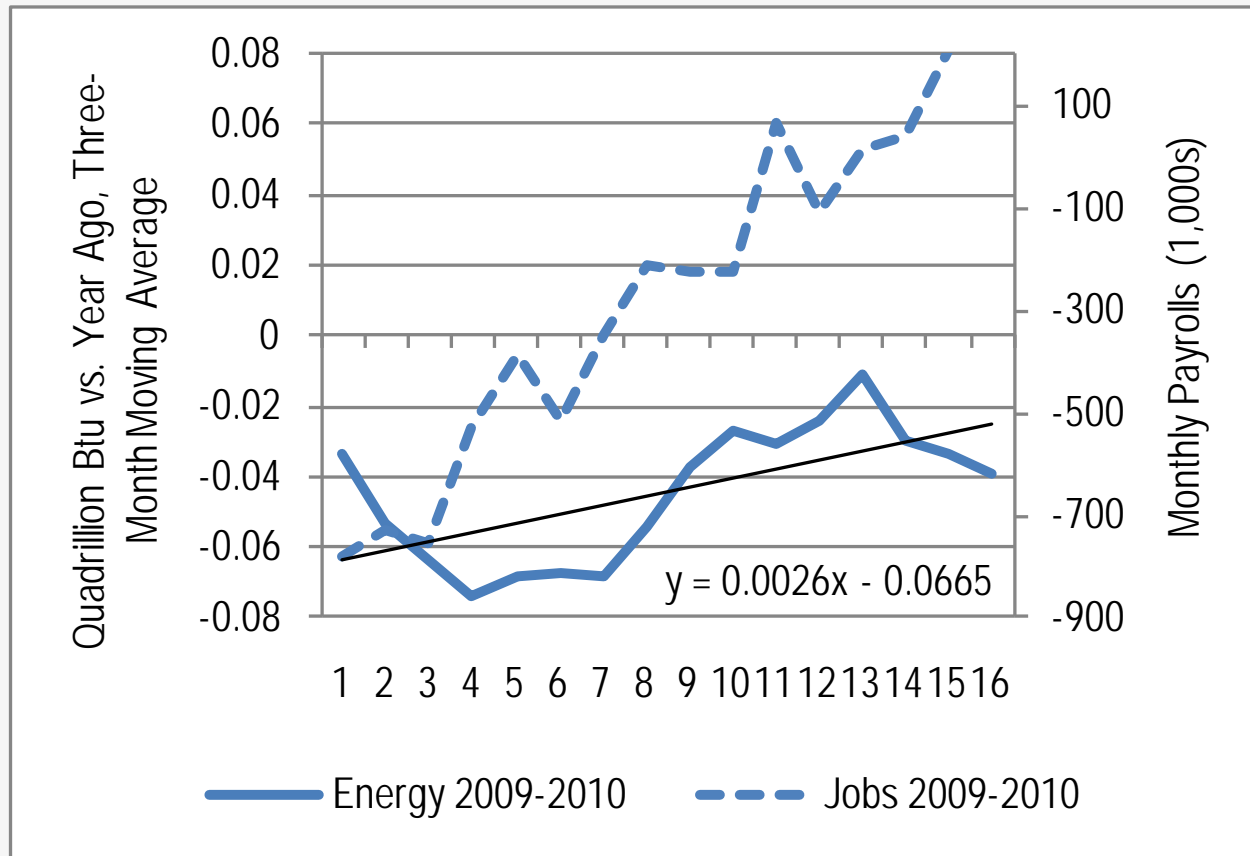
The U.S. is Consuming Considerably Less Energy per Job Recovered Than During the 2001-2002 Recovery



Source: ClearView Energy Partners, LLC, using data from BLS and EIA

SURPLUS SUPPLY + DEMAND DEFICIT = FUEL FIGHT

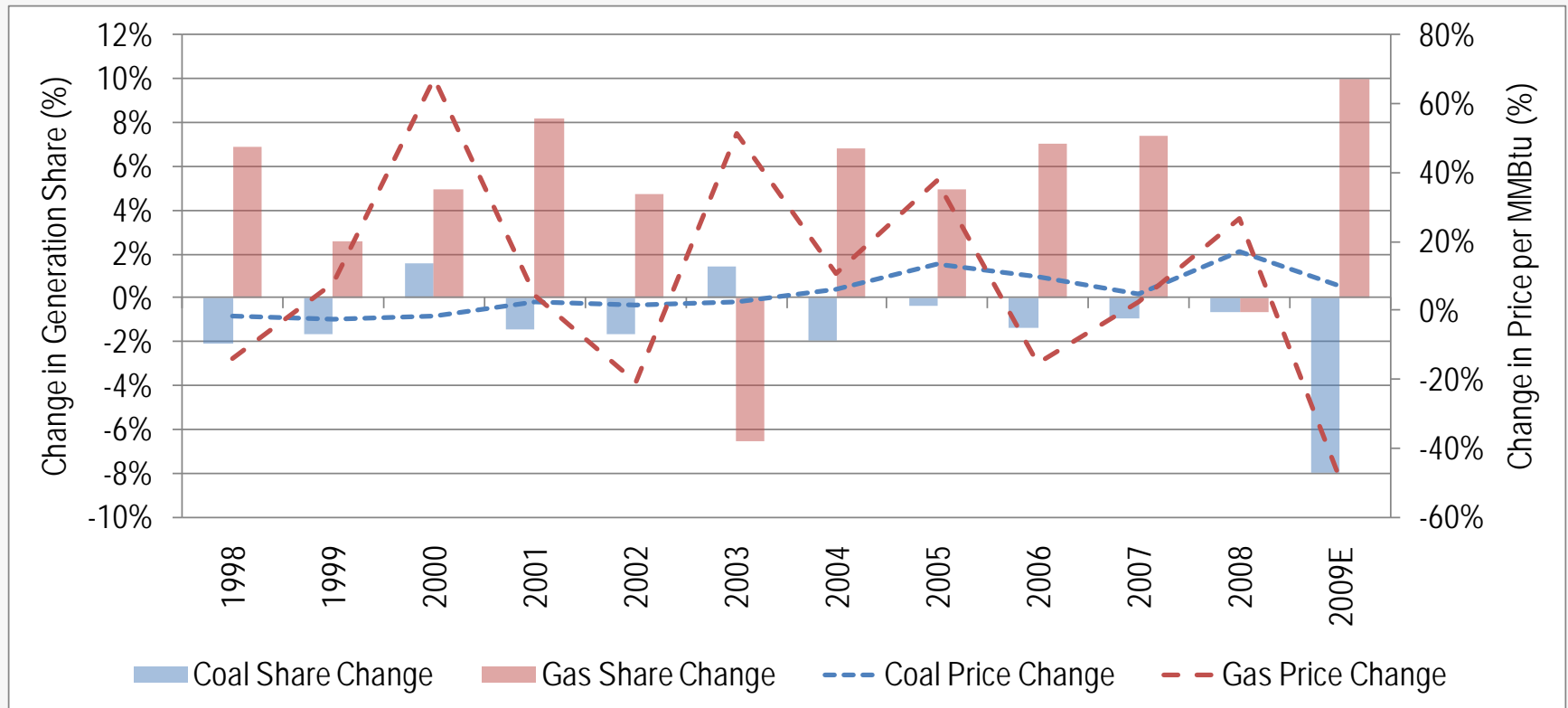
The U.S. is Consuming Considerably Less Energy per Job Recovered Than During the 2001-2002 Recovery



Source: ClearView Energy Partners, LLC, using data from BLS and EIA

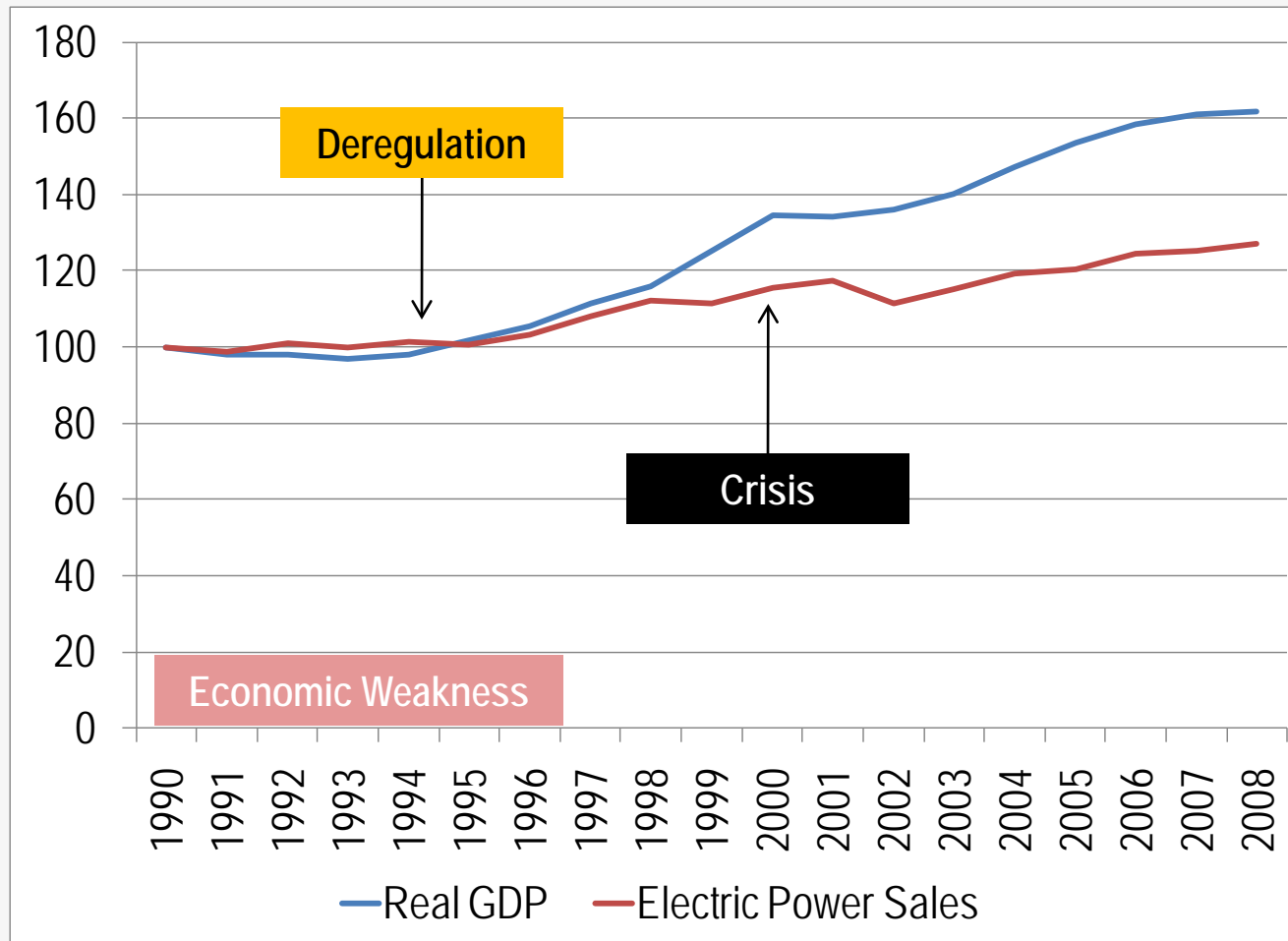
SMALL PRICE INCREASE, BIG MARKET SHARE DECLINE

Small Coal Price Increases Bring Big Generating Share Losses in a Down Market



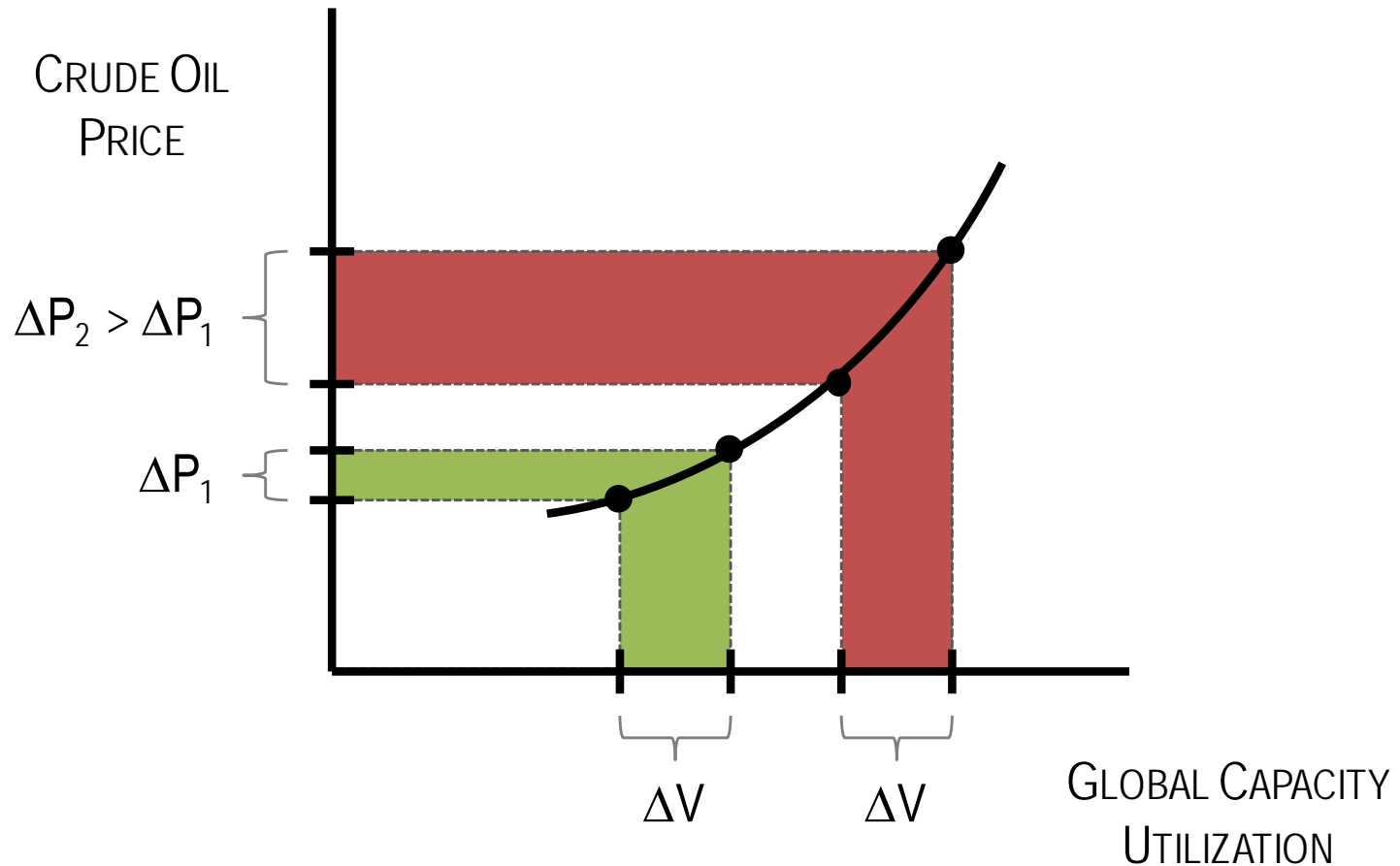
Source: ClearView Energy Partners, LLC, using EIA data

CASE STUDY: CALIFORNIA: PAST PERFORMANCE DOES NOT EQUAL FUTURE RESULTS



Source: ClearView Energy Partners, LLC, using data from BEA and EIA

COMMODITY PRICING DYNAMICS AND POLITICAL CONSTRAINTS



Source: ClearView Energy Partners, LLC

9.29.2008: **THIS** IS MARKET-BASED POLITICAL ACCOUNTABILITY...

BREAKING NEWS



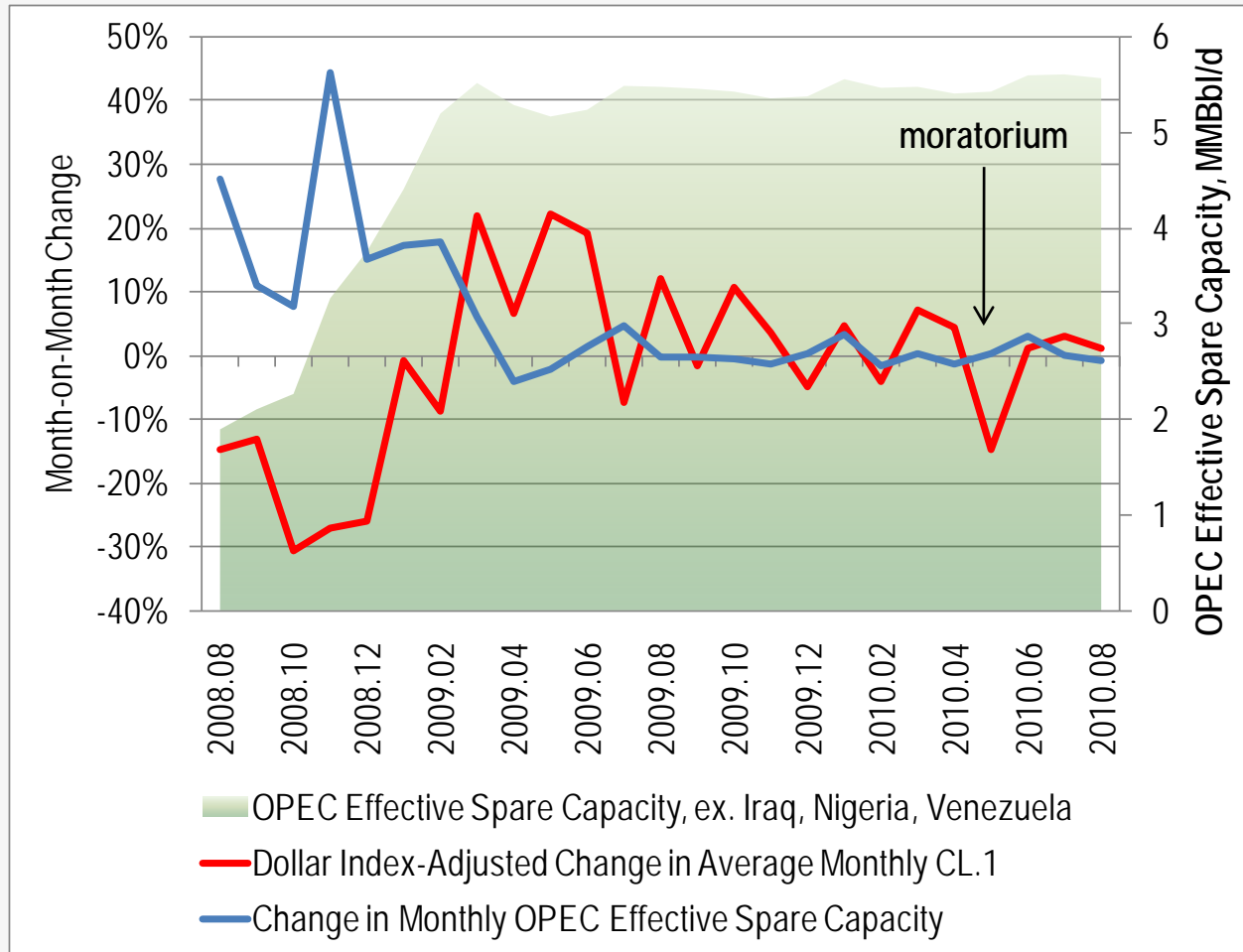
Bailout bill fails; Dow plunges

The House of Representatives today rejected a \$700 billion plan to bail out the U.S. financial system, putting a roadblock in front of the largest government intervention in the markets since the Great Depression. The next steps were not clear, but supporters were scrambling to salvage the package. The Dow was down more than 600 points after the voting ended. [developing story](#)

• [CNNMoney: Stocks tumble](#) • [Read a draft of the bill | Bailout Tracker](#)

Source: CNNMoney

...AND THIS IS NOT



Source: ClearView Energy Partners, LLC using data from IEA, EIA and Federal Reserve

WHY ETHANOL MATTERS EVEN THOUGH IT'S NOT A PRESIDENTIAL ELECTION

State	Production Capacity (MM gal/Y)	% of US Corn Ethanol	% of US Cellulosic Ethanol	House Delegation	Senate Delegation	House D's at Risk	Senators on Cycle	2006 New House D's	2008 New House D's	2008 Electoral Votes
IA	3,183	24.40%	13.00%	3D, 2R	1D, 1R		1R	2	0	7
NE	1,454	11.20%	5.00%	0D, 3R	1D, 1R			0	0	5
IL	1,350	10.40%		12D, 7R	2D, 0R	3	1D	0	1	21
MN	1,113	8.50%		5D, 3R	2D, 0R			1	0	10
SD	1,016	7.80%		1D, 0R	1D, 1R		1R	0	0	3
IN	706	5.40%		5D, 3R, 1V	1D, 1R	2	1D	3	0	11
WI	498	3.80%		5D, 3R	2D, 0R	1	1D	1	0	10
KS	437	3.40%	5.00%	1D, 3R	0D, 2R		1R	1	0	6
OH	314	2.40%		10D, 8R	1D, 1R	2	1R	1	3	20
TX	250	1.90%		12D, 20R	0D, 2R	1		2	0	34
Top 10 Producers	10,320	79.20%	22.00%			9		11	4	127

Source: ClearView Energy Partners, LLC, EIA, RFA, House Office of the Clerk, CNN, US Senate, Electoral College

THE POLITICAL REALITY OF THE MORATORIUM

State	Oil Production (B bbl/Y)	Natural Gas Production (MM Mcf/Y)	% of US Production (B bbl OE)	House Delegation	Senate Delegation	House D's at Risk	Senators on Cycle	2006 New House D's	2008 New House D's	2008 Electoral Votes
AL	7,546	49,194	0.89%	2D, 5R	0D, 2R	1	1R	0	1	9
MS	22,102	61,408	1.31%	3D, 1R	0D, 2R	1		0	0	6
LA	73,011	245,843	4.99%	1D, 6R	1D, 1R	1	1R	0	0	9
TX	398,014	1,375,563	27.78%	12D, 20R	0D, 2R	2		2	0	34
GOM Producers	500,673	1,732,007	34.97%			5		2	1	58
FL	1,956	486	0.04%	10D, 15R	1D, 1R	4	1R	1	2	27
Net Impact						1				85

Source: ClearView Energy Partners, LLC, EIA, House Office of the Clerk, CNN, US Senate, Electoral College

KEY TURNING POINTS IN THE OFFSHORE DRILLING POLICY STORY

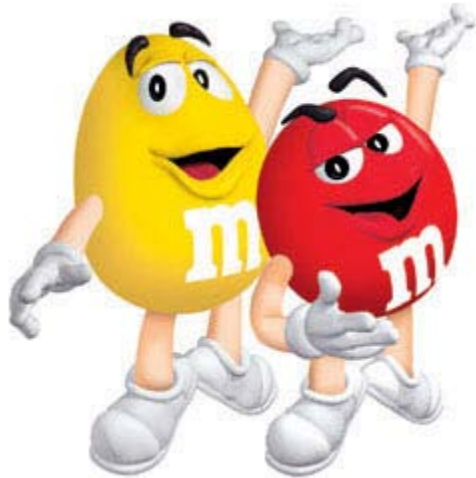
- **1953:** Outer Continental Shelf Lands Act
- **1958:** Geneva Convention on the Outer Continental Shelf
- **1981:** Congressional moratoria begin
- **1995:** Deepwater Royalty Relief Act
- **2005:** EPL05 extends DWRR, creates new incentives for ultra-deep wells in shallow water
- **2006:** Interior department draws “administrative boundaries”
- **2007:** Bush Administration includes Virginia in 5Y offshore leasing program
- **2008:** Presidential withdrawal lifted, Congressional moratoria lapse
- **2010:** Virginia Withdrawn from 5Y program, Alaska delayed

KEY PRINCIPLES

- Two Types of Policy Responses:
 - Legislative → slow-moving, but long-lasting, if not permanent
 - Regulatory → can be quicker, but not necessarily durable
- Three Tiers of Policy Response:
 - Regulatory reform: regulatory and/or legislative
 - Fixed and variable cost changes: regulatory and/or legislative
 - A Congressional “stampede”: legislative only (obviously)
 - Example #1: Sarbanes-Oxley (if Macondo is Enron, what could be WorldCom)?
 - Example #2: 2008 vote to suspend the SPR fill passes 97-0
 - Example #3: Dubai Ports World

CHANGING THE CHARACTER OF OFFSHORE REGULATION

MMS



- Hard Candy Shell, Very Sweet
- “Enabling” Regulator
- 30-day turnaround on exploration plans
- Categorical exclusions

~~FAVRE~~ BOEMRE



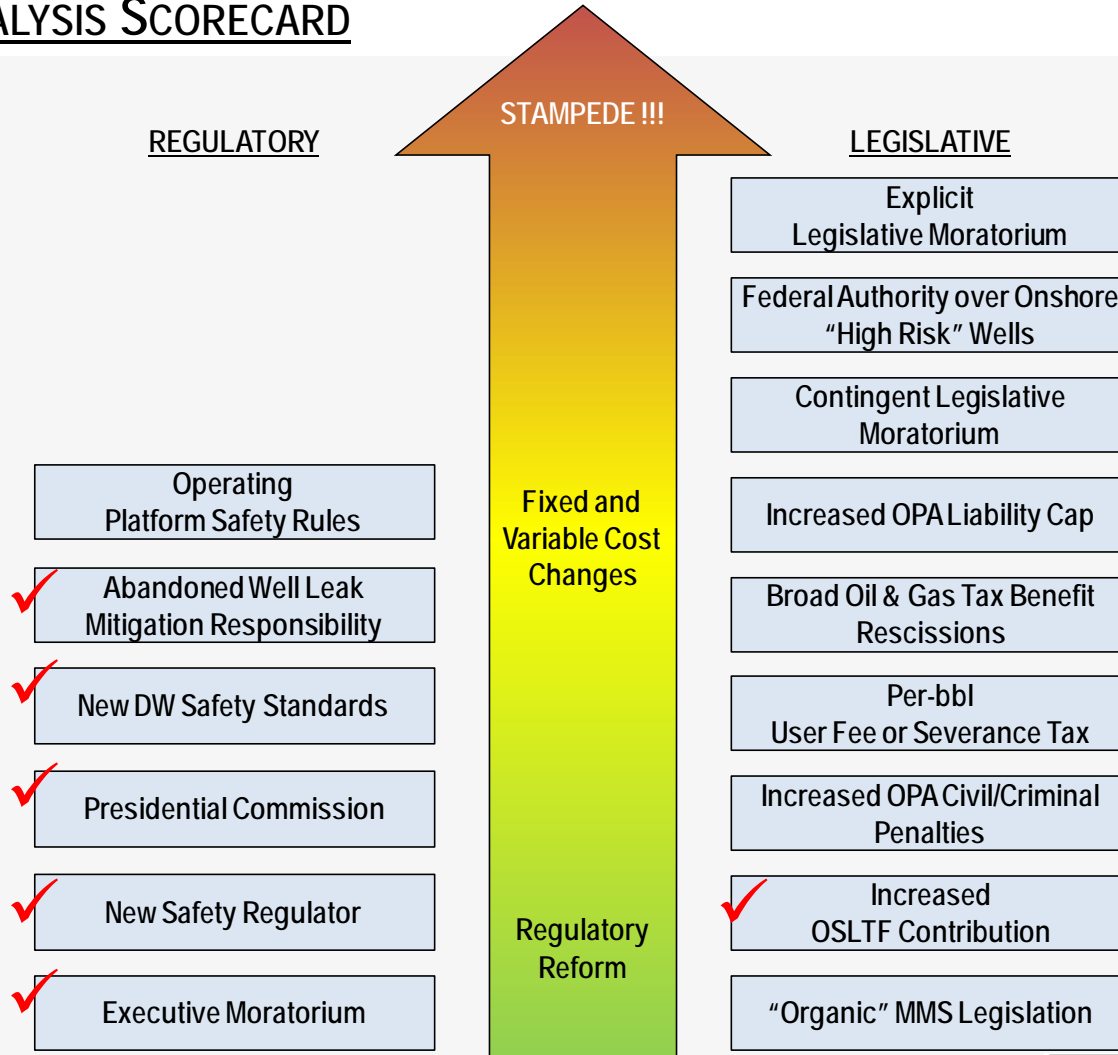
- Hard to Pronounce
- “Enabling” Regulator
- “Limiting” Regulator
- 90-day turnaround?
- New EIS/EA requirements

Source: M&M Mars Corp., Media Sources

FIXED AND VARIABLE COST CHANGES

- **Higher liability limits:** at 2% of liability estimated premium, \$1.5 billion \approx \$30 MM fixed cost
- **Higher bonding requirements:** \$105MM in cash tied up per well?
- **Higher civil and criminal penalties:** \$4,300/bbl is already the largest potential cost of spill
- **Higher mineral royalties:** 16.67% in shallow-water, 18.75% in deepwater, going up?
- **Higher OSLTF contribution:** \$0.08/bbl to \$0.78/bbl in only five months!
- **“Conservation” fees:** \$2/bbl, \$0.20/Mcf cleared the House; \$9/bbl has been proposed

SCENARIO ANALYSIS SCORECARD



Source: ClearView Energy Partners, LLC

IN A CONGRESSIONAL "STAMPEDE", THERE IS NO DIFFERENCE

DOGS



Source: Mars Veterinary, Associated Press

RIGS



WHY RISK WASHED ONSHORE

Event	Policy Response
Upper Big Branch, April 5, 2010	Regulatory: Company-specific investigations, enforcement
<i>Deepwater Horizon</i> , April 20, 2010	Regulatory: regulatory reforms, fixed and variable cost changes, potential civil/criminal penalties. Legislative: variable cost changes likely, possibly more
Clearfield County, PA gas well blowout, June 3, 2010	Regulatory: company-specific Legislative: change of sentiment?
Moundsville, WV gas well blowout, June 7, 2010	Regulatory: company-specific Legislative: federal concern about adequacy of local regulators?

At the Three Mile Island nuclear plant in 1979, no plant workers died or suffered injuries, but a tremendous number of stakeholders outside the direct extraction value chain could have been harmed. It may be that potential stakeholder externalities produce a greater political reaction than financial losses or worker fatalities.

LAWMAKERS' RISK PERCEPTIONS OF THE OIL & GAS INDUSTRY

Rep. Mike Doyle (D-PA)
1/20/2010



Last year alone Pennsylvania could attribute nearly 50,000 jobs to environmentally safe natural gas production. I have long supported the development of domestic natural gas resources as one of the solutions to meeting the growing energy demands in the United States.

Source: Congressional Record, website of Rep. Mike Doyle

LAWMAKERS' RISK PERCEPTIONS OF THE OIL & GAS INDUSTRY

Rep. Mike Doyle (D-PA)
6/15/2010



There is simply no reason we should continue to extract our natural resources in a hegemonic and voracious style. [...] The natural gas in the Marcellus Shale isn't going anywhere. I think it's time we take a step back ...

Source: Congressional Record, website of Rep. Mike Doyle

FIRST OF ALL, \$1 TRILLION OF PRESENT VALUE MAKES A DIFFERENCE

Category	ACES	CEJAPA	CLEAR*	CLEAR**	APA
Agriculture	\$0.79	\$12.78			
Coal and CCS	\$44.70	\$34.85			\$40.64
Consumers	\$173.80	\$145.75	\$478.85	\$555.99	\$375.17
Efficiency/Renewables	\$67.68	\$51.32			\$8.80
Electric Power	\$290.66	\$243.59			\$282.62
Federal or Deficit Reduction	\$12.14	\$155.46			\$98.70
Heating Oil/Propane	\$12.29	\$10.14			\$11.49
Highway trust fund					\$70.51
International***	\$97.98	\$78.93			\$69.66
Manufacturing	\$75.47	\$90.40			\$88.44
Natural Gas	\$50.06	\$40.91			\$50.66
Oil/Gas/Refining	\$14.38	\$11.77			\$28.01
Other	\$0.56	\$1.84			\$1.61
R&D	\$17.38	\$17.99			\$14.42
Reserve	\$21.85	\$29.91			\$31.39
State	\$52.28	\$63.75			\$21.10
Vehicle	\$13.93	\$11.60			\$4.64
Worker Training	\$9.67	\$8.39			
CERT Fund			\$159.62	\$185.33	
Total	\$955.63	\$1,009.37	\$638.47	\$741.32	\$1,128.19

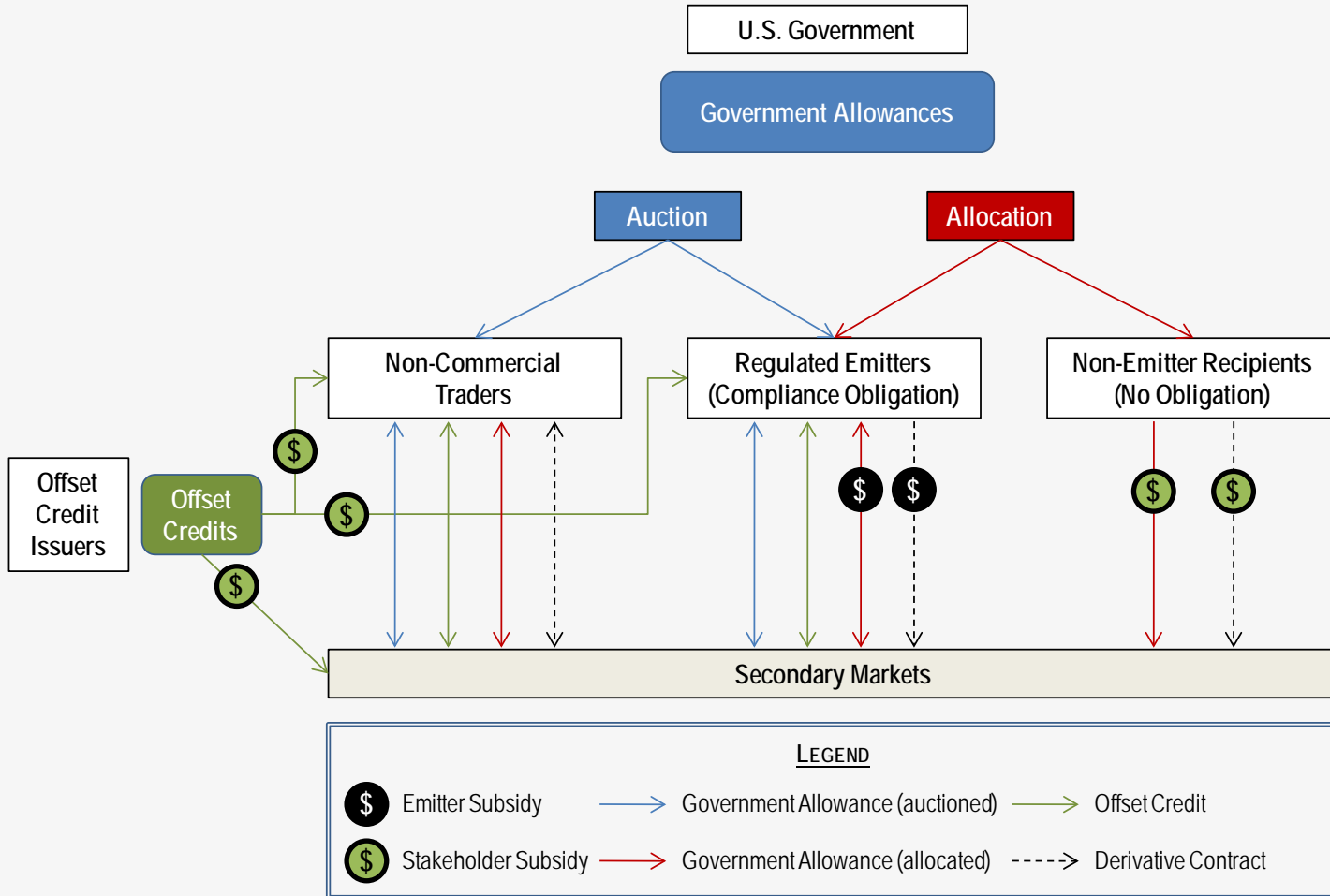
* using \$7 floor price stipulated in December 2009 legislation

** using \$12 floor price set by American Power Act

*** contingent on binding bilateral, multilateral treaties, not counted in this total

Source: ClearView Energy Partners, LLC

SECOND OF ALL, IT WASN'T JUST \$1 TRILLION

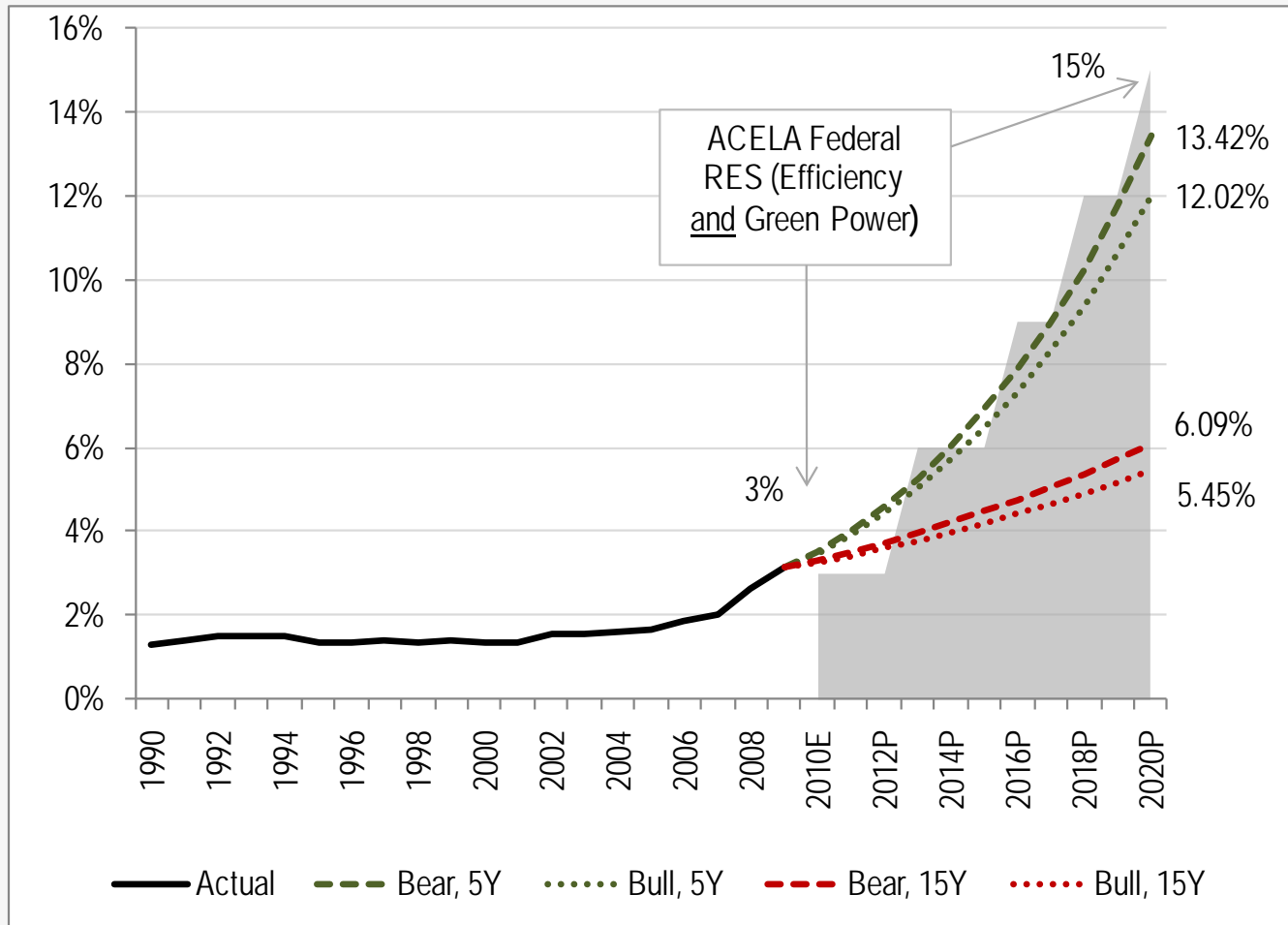


THE "CONTINGENT BARGAIN" IS OVER

Issue, Technology or Fuel	The Contingent Bargain	What's Left
GHG Emissions	Free allowances, cap-and-trade; CCS subsidies, preemption of EPA regulation under CAA	To-be-defined BACT standards
SO ₂ , NO _x and Hg Emissions	Cap-and-trade for SO ₂ , NO _x ; later Hg deadline	New NAAQS for SO ₂ , NO _x ; Hg MACT; and stringent trading limitations under the EPA Transport Rule
Oil Refining	"Linked fee" and EPA Preemption	CAA/CWA Crackdown at State Level
Natural Gas Demand	NGV Subsidies, Coal-to-CCGT Incentives	The "Green Squeeze" Via State RPS
Hydraulic Fracturing	Light Regulation – Disclosure Only	CBM Study, Shale Study, Disclosure and "Stampede" Risk, Local
Wind and Solar	National RES	Possible Section 1603 Lapse
Nuclear Power	\$54B in loan guarantees; broader "standby support"; tariff exemptions	Possible new loan guarantees

Source: ClearView Energy Partners, LLC

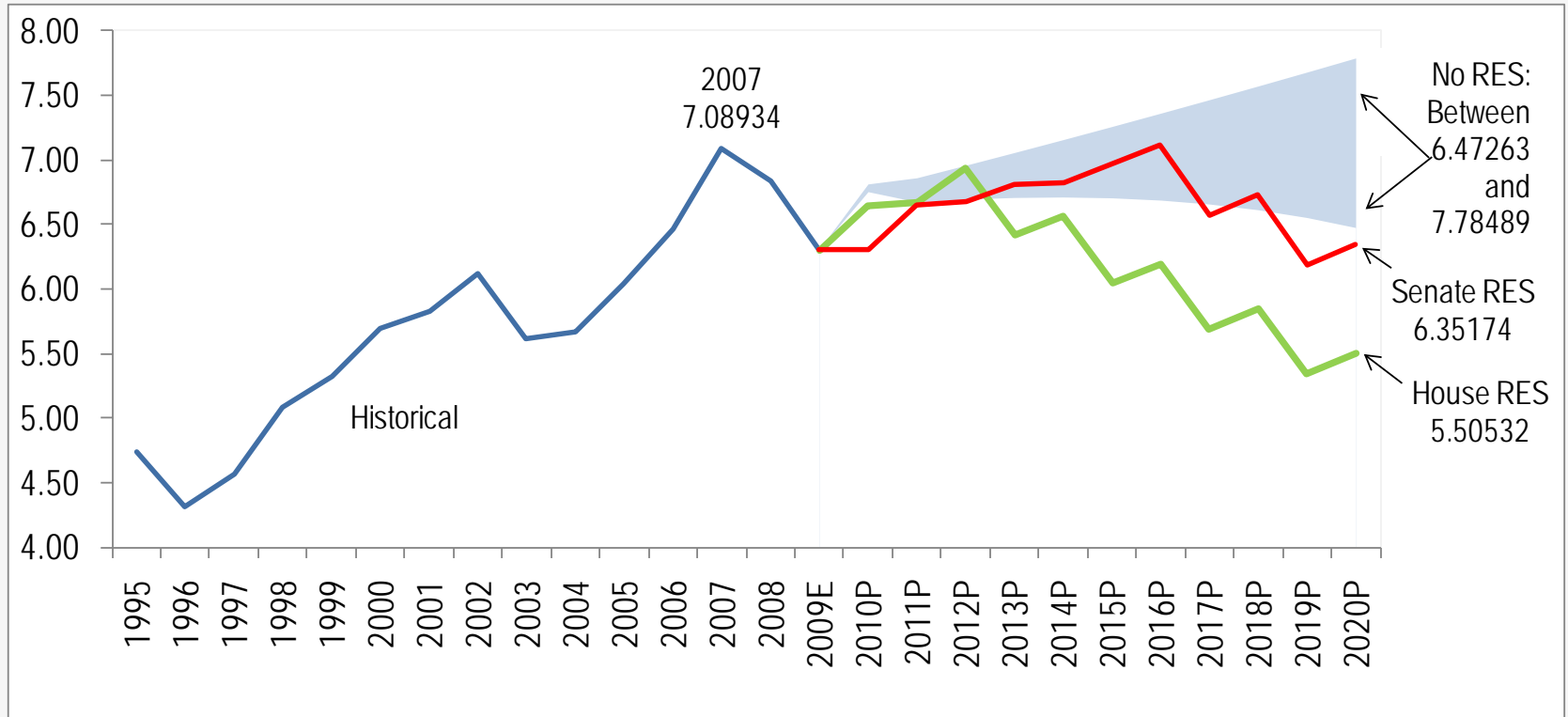
NO BIG CLIMATE = NO RES: GREEN POWER AS A % OF PROJECTED SALES



Source: ClearView Energy Partners, LLC, EIA, Library of Congress

NO FEDERAL RES = LESS CHANCE OF A GREEN SQUEEZE

Projected Scenarios for Electric Sector Natural Gas Demand (Tcf/Y)



Source: ClearView Energy Partners, LLC, EIA, Library of Congress

BUT NO BIG CLIMATE ALSO MEANS FUEL-SWITCHING DEMAND HARDER TO OBTAIN**Retirement "Candidates": 55 Merchant Coal-Fired Power Plants**

Candidates	Nameplate (MW)	Estimated Emissions (MtCO ₂ e/Y)	Savings from CCGT (High)	Savings from CCGT (Low)	Implied Demand (Mcf/Y)
All	32,425	171,900,852	117,852,528	109,663,388	1,196,820,969
Scrubbed	9,834.8	61,356,334	42,453,958	39,589,962	418,565,436
Unscrubbed	22,590	110,544,518	75,398,570	70,073,427	778,255,533

Incremental Natural Gas Demand, Bcf/Y, by Fleet	2012	2013	2014	2015	2016	2017	2018	2019	2020
Rental Cars (Enterprise, National, Alamo)	18.84	37.68	56.52	75.36	94.20	94.20	94.20	94.20	94.20
Buses	7.64	15.36	23.15	31.03	38.98	47.01	55.12	63.32	71.59
Single-Unit Trucks	64.59	129.83	195.73	262.28	329.49	397.38	465.95	535.20	605.15
18-Wheelers	179.00	359.78	542.37	726.79	913.06	1,101.18	1,291.19	1,483.10	1,676.92
Total per year	270.07	542.65	817.78	1,095.46	1,375.73	1,639.78	1,906.46	2,175.82	2,447.86
Cumulative (Tcf)	0.27	0.81	1.63	2.73	4.10	5.74	7.65	9.82	12.27

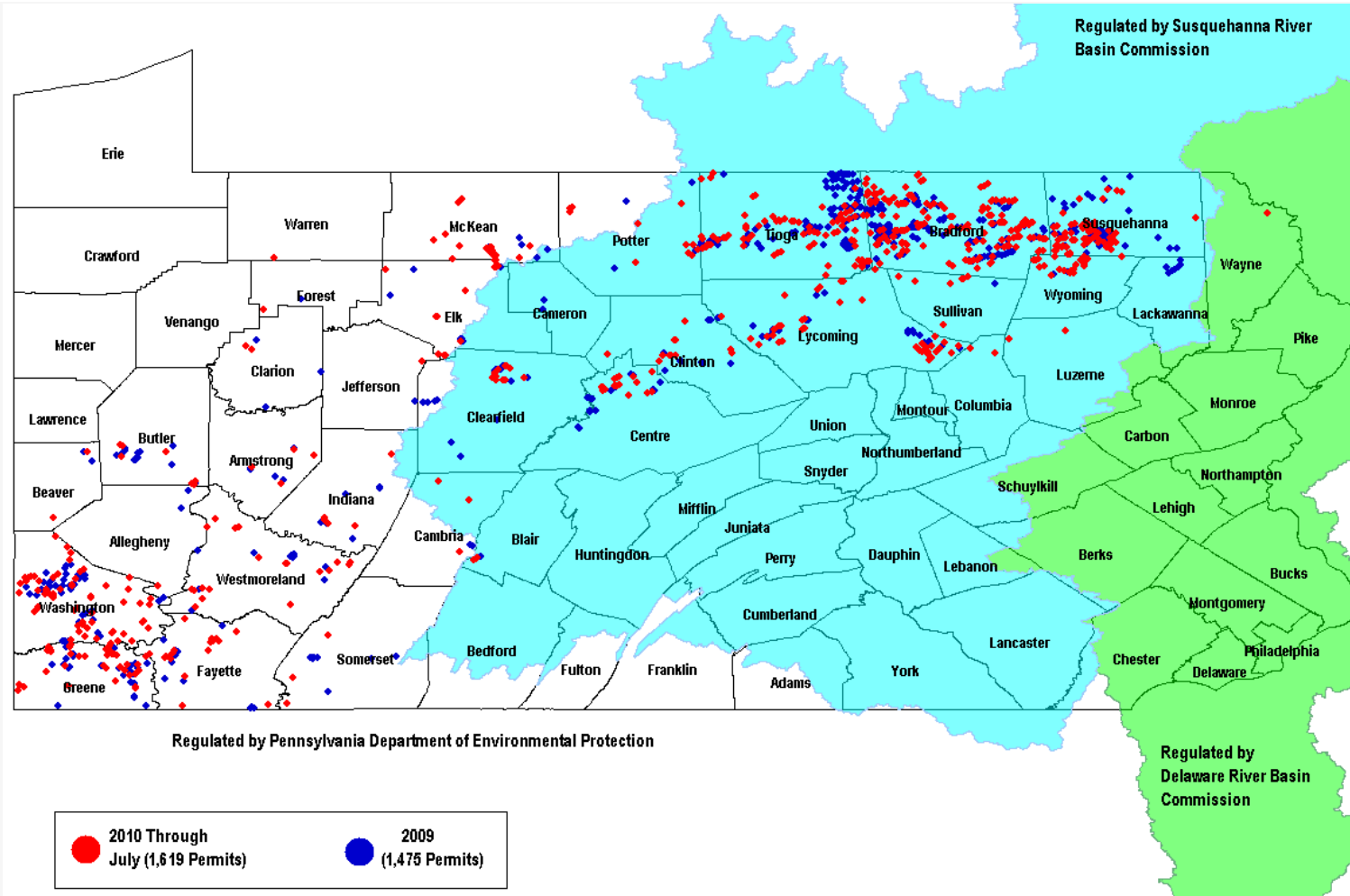
Source: ClearView Energy Partners, LLC

TAX POLICY CHANGES REQUIRE ONLY 51 SENATE VOTES

Program Area	2009 Mid-Year Review	FY2011 Budget Request
<i>IOCs</i>		
Modify tax rules for dual capacity taxpayers	-4,897	-8,549
<i>Could Impact IOCs, U.S. E&Ps and Services Companies</i>		
Levy tax on certain offshore oil and gas production	-5,300	0
Repeal enhanced oil recovery credit	0	0
Repeal credit for oil and gas produced from marginal wells	0	0
Repeal expensing of intangible drilling costs	-6,994	-7,839
Repeal deduction for tertiary injectants	-62	-67
Repeal exception to passive loss limitations for working interests in oil and natural gas properties	-49	-180
Repeal percentage depletion for oil and natural gas wells	-9,035	-10,026
Repeal domestic manufacturing tax deduction for oil and natural gas companies	-13,292	-17,314
Increase G&G amortization period for independent producers to seven years	-1,235	-1,110
Repeal ultra-deepwater oil and gas research and development program	-250	-200
Fee on nonproducing oil and gas leases	-1,156	-760
Repeal Energy Policy Act fee prohibition and mandatory permit funds	-242	-85

Source: ClearView Energy Partners, LLC

THE NATIONAL IMPLICATIONS OF "BATTLEGROUND PENNSYLVANIA" (AND PAVILION, WY)



Source: ClearView Energy Partners, LLC

BOLD PREDICTIONS AND LOOSE ENDS

- **3P/4P Utility-Only Bill Next Year?**
 - Potential for PC-to-CCGT incentives
 - Potential for RES
 - Potential for NGV
- **Regulatory Mayhem**
 - Supply Downside: Tailoring Rule Risks Through Aggregation
 - Demand Upside: Multipollutant Woes Come Home to Roost
 - Window for Frack Attack Probably Closes 3Q2011, but CapEx Ends, Then, Too
- **Looming**
 - Underbuilt Supply and an End-User Rally?
 - The Efficiency “Bomb” (ARRA Weatherization) or HomeSTAR
 - Exporting LNG from the United States? Fine, Until it Starts Happening...