

The Economic Impact of the Waxman Markey Bill (H.R. 2454)

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By: Dr. Margo Thorning, Ph.D.

Senior Vice President and
Chief Economist

American Council for Capital Formation

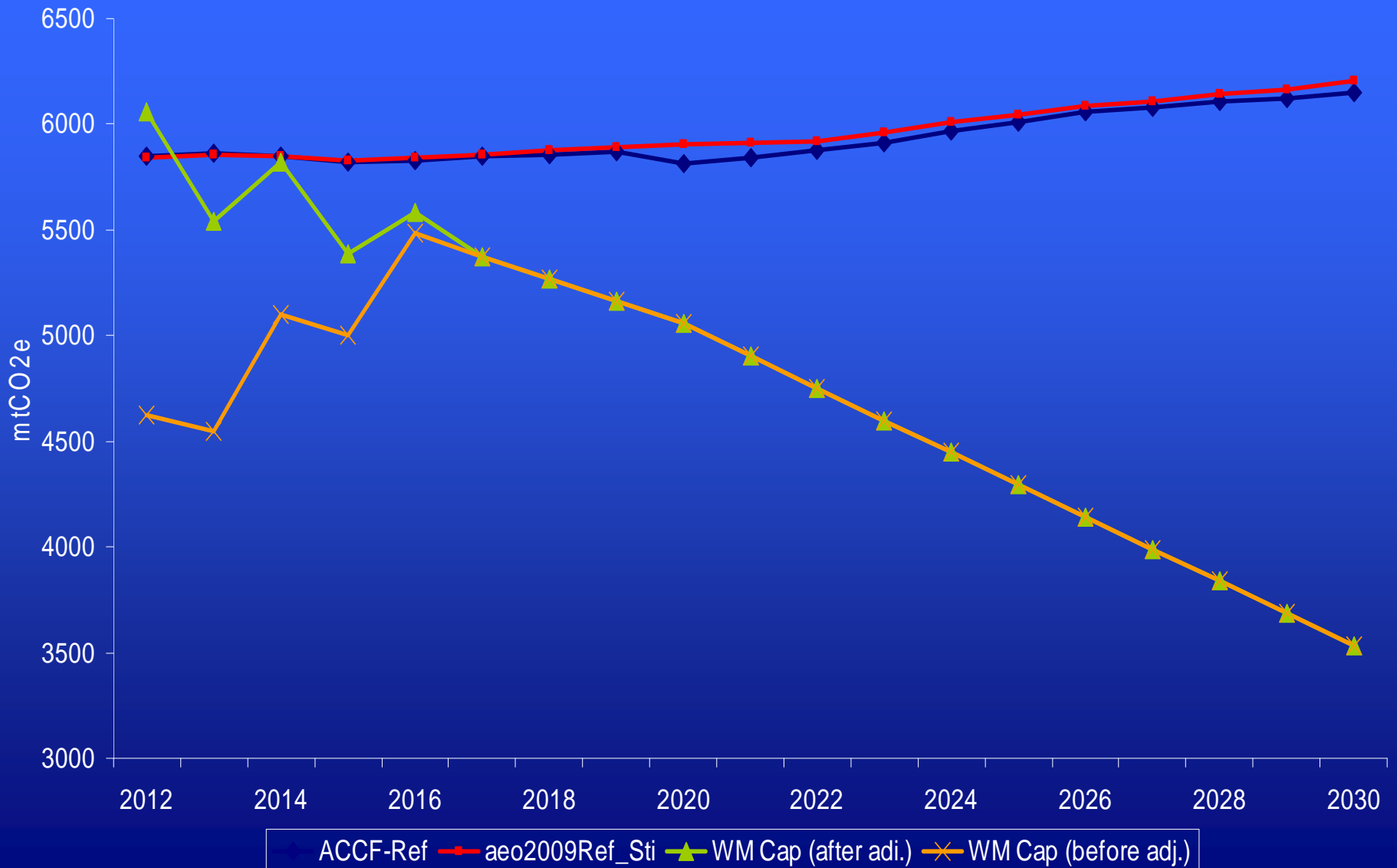
Washington, D.C.

www.accf.org

Tel: 202-293-5811

Mthorning@accf.org

Macroeconomic Impact of Waxman Markey Bill: Total Energy Sector CO2 Emissions



Assumptions Used in Modeling: Technology Build Constraints (2030 Build Limits)

	High Cost Scenario	Low Cost Scenario
Nuclear	10 GW	25 GW
IGCC w Sequestration	15 GW	30 GW
Biomass	Max 3 GW/Year	Max 5 GW/Year
Wind	Max 5 GW/Year	Max 10 GW/Year
NGCC w Sequestration	15 GW	30 GW

Assumptions Used in Modeling: Other Specifications

	High Cost Scenario	Low Cost Scenario
Offsets (annual)	1,000 MMT (split 95% Domestic, 5% International)	1,000 MMT (split 95% Domestic, 5% International)
Oil Price Profile	AEO2009	AEO2009
Natural Gas Prices	Not Constrained	Not Constrained
Cellulosic Ethanol	With HR.6 – Not Constrained	With HR.6 – Not Constrained
Banking	5,000 MMT	5,000 MMT
HR.6	Yes	Yes
Allowance Prices (annual growth)	Constrained to 10%	Constrained to 10%
Strategic Reserve	Not modeled	Not modeled

Macroeconomic Impact of Waxman Markey Bill: Carbon Allowance Price (2007\$/Ton CO₂)



Impact of Waxman Markey Bill on the United States Compared to Baseline Forecast

	Low Cost Case			High Cost Case		
	2020	2025	2030	2020	2025	2030
Loss in GDP	-0.2%	-0.5%	-1.8%	-0.4%	-0.8%	-2.4%
Loss in Jobs (millions)	0.01	-0.33	-1.79	-0.08	-0.52	-2.44
Loss in Household Income (2007\$)	-\$118	-\$339	-\$730	-\$250	-\$564	-\$1,248

Impact of Waxman Markey Bill on the United States: Change in Energy Prices Compared to Baseline Forecast

	Low Cost Case			High Cost Case		
	2020	2025	2030	2020	2025	2030
Rise in Gasoline Prices	8.4%	12.1%	20%	11.1%	16.1%	26.1%
Rise in Residential Electricity Prices	5%	4.9%	31.4%	7.9%	11.5%	50%
Rise in Industrial Electricity Prices	12.5%	18.4%	48.9%	21.5%	32%	76%
Rise in Industrial Natural Gas Prices	33.3%	61%	87.1%	51.1%	86.3%	113.5%

Impact of Waxman Markey Bill on the United States: Change in Industrial Value of Shipments and Employment in Manufacturing

	Low Cost Case			High Cost Case		
	2020	2025	2030	2020	2025	2030
% Loss in Industrial Value of Shipments	-1.8%	-3.1%	-5.3%	-2.2%	-3.7%	-6.5%
Loss in Manufacturing Employment	210,000	380,000	580,000	280,000	490,000	740,000
% Loss in Manufacturing Employment	-1.8%	-3.3%	-5.8%	-2.3%	-4.2%	-7.3%

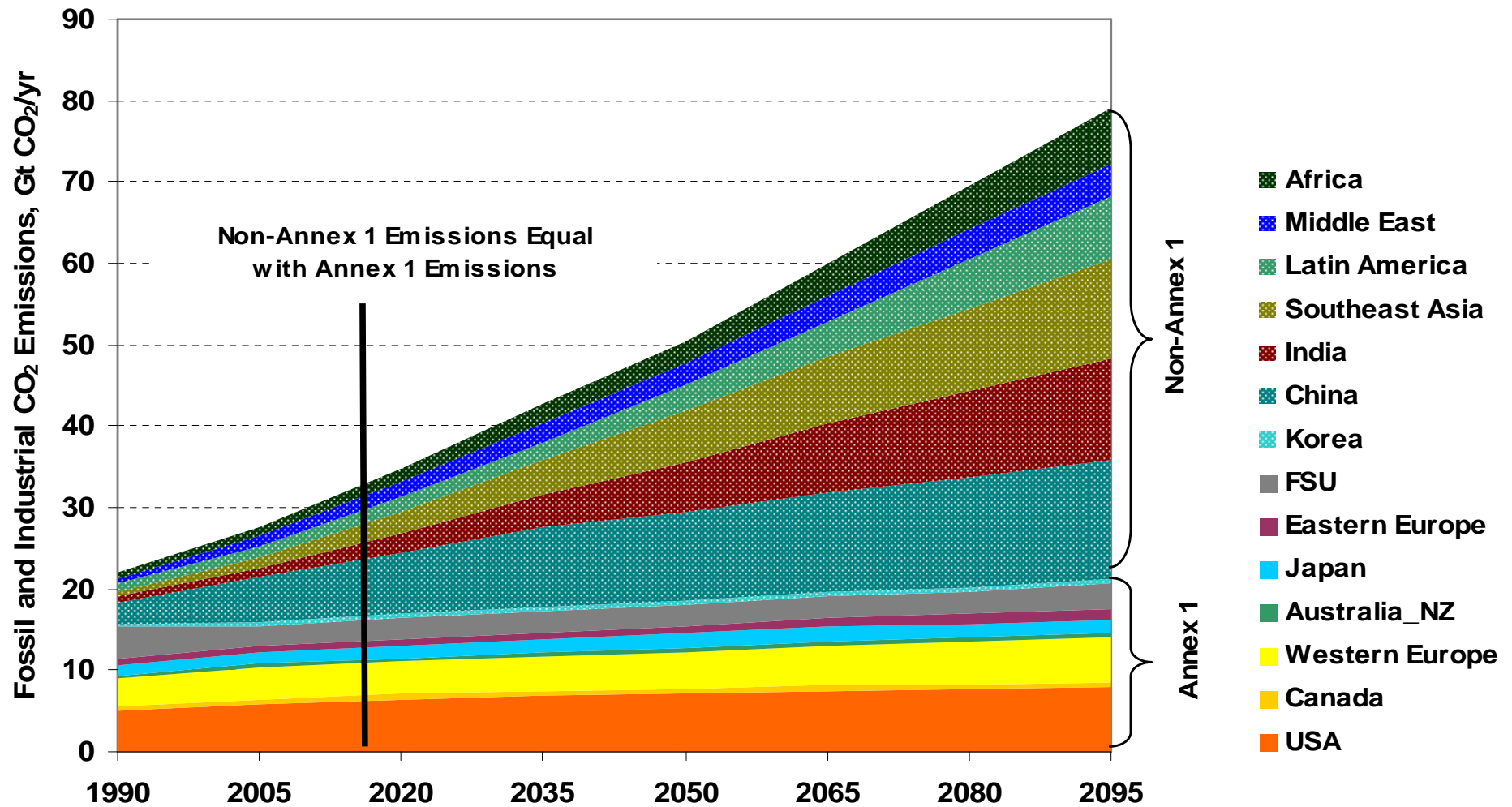
Macroeconomic Impact of Waxman Markey Bill: Changes in Louisiana Economy Compared to Baseline Forecast

	Low Cost Case		High Cost Case	
	2020	2030	2020	2030
Loss in GSP (million 2007\$)	-\$483	-\$5,089	-\$830	-\$6,943
Loss in Jobs	150	-26,066	-1,069	-35,500
Loss in Household Income (2007\$)	-\$68	-\$485	-\$171	-\$874

Macroeconomic Impact of Waxman Markey Bill: Change in Energy Prices in Louisiana Compared to Baseline Forecast

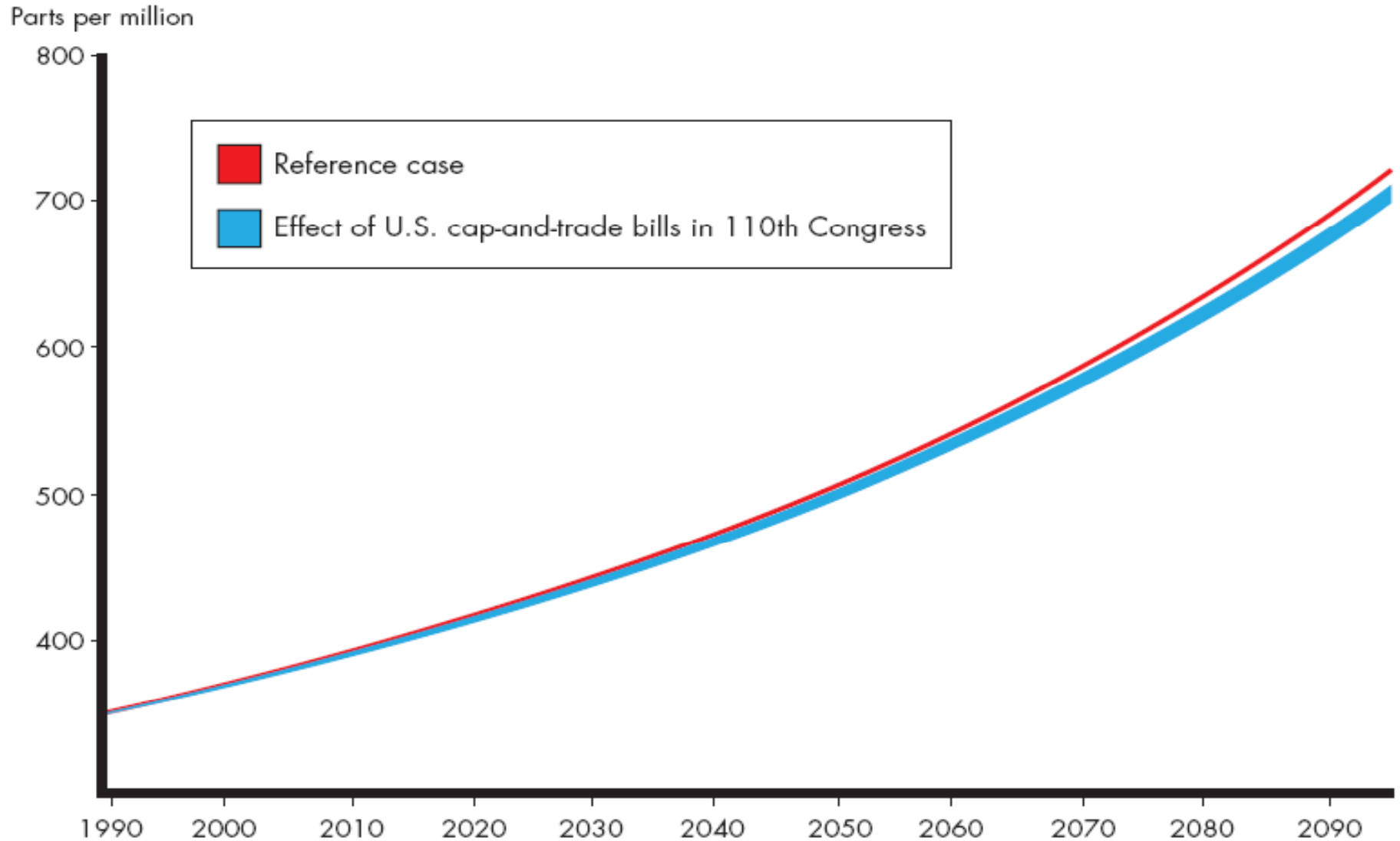
	Low Cost Case		High Cost Case	
	2025	2030	2025	2030
Rise in Gasoline Prices	12%	20%	16%	26%
Rise in Residential Electricity Prices	2%	31%	12%	54%
Rise in Residential Natural Gas Prices	5%	58%	11%	77%

World Carbon Dioxide Emissions



Source: Data derived from *Global Energy Technology Strategy, Addressing Climate Change: Phase 2 Findings from an International Public-Private Sponsored Research Program*, Battelle Memorial Institute, 2007.

Global CO2 Concentrations: Carbon emissions are projected to rise over the next several decades



Practical Strategies for Reducing Global Greenhouse Gas Growth

- **Use cost / benefit analysis before adopting policies**
- **If U.S. puts a price on carbon emissions, a carbon tax is preferable to cap and trade**
- **Reduce cost of U.S. energy investment through tax code improvement and incentives for non profits**
- **Remove barriers to developing world's access to more energy and cleaner technology by promoting economic freedom and market reforms**
- **Increase R&D for new technologies to reduce energy intensity, capture and store carbon, and develop new energy sources**
- **Promote nuclear power for electricity**
- **Promote truly global solutions and consider expanding the Asia Pacific Partnership on Development with its focus on economic growth and technology transfer to other major emitters**