COMPREHENSIVE TAX REFORM AND U. S. ENERGY POLICY

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Hidden Costs of Energy

The Role of Government Policy

Climate Policy

Current Energy Policy

HIDDEN COSTS OF ENERGY

NRC's *Hidden Costs of Energy*

EPA's *Second Retrospective Study*

Muller-Mendelsohn-Nordhaus
Environmental Accounts

THE ROLE OF GOVERNMENT POLICY

Depletion Costs

New Technologies

Tax Incentives for Energy Production

MARKET FAILURES AND ENERGY UTILIZATION

Energy-Related Tax Expenditures

Cost-Effective Energy Taxes

Muller-Mendelsohn and the Six Criterion Pollutants

Costs of Climate Change

ALTERNATIVES TO ENERGY TAXES

Waxman-Markey Cap-and-Trade System

Energy Standards

Tax Expenditures for Energy Conservation

ENERGY PRODUCTION TAX CREDITS

Table 1.–Comparison of Selected Energy Production Tax Credits			
	(Column 1) Statutory credit amount	(Column 2) Credit amount in dollars per MMBtu of heat energy	(Column 3) Credit amount in dollars per MMBtu of heat energy of displaced fossil fuel feedstock**
Wind power	2.2 cents per kilowatt-hour	$6.45	$2.25
Geothermal power	2.2 cents per kilowatt-hour	$6.45	$2.25
Open-loop biomass	1.1 cents per kilowatt-hour	$3.22	$1.13
Advanced nuclear power	1.8 cents per kilowatt-hour	$5.28	$1.85
Ethanol*	45 cents per gallon	$5.92	$5.92
Biodiesel*	$1 per gallon	$8.45	$8.45

THE CASE FOR COMPREHENSIVE TAX REFORM

The Fiscal Cliff

Bowles-Simpson

Efficient Taxation of Income

The Role of Energy Taxes

THE ROLE OF ENERGY TAXES

Damages (tax rates) as a percent of consumer prices

	Non-climate			Climate			Combined		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Coal	16.20%	181.68%	464.60%	12.92%	41.79%	89.22%	29.12%	223.47%	553.82%
Petroleum	0.99%	8.51%	11.25%	0.93%	3.01%	6.42%	1.92%	11.51%	17.68%
Natural Gas	0.03%	0.79%	0.82%	2.24%	7.26%	15.50%	2.27%	8.05%	16.32%

Tax revenues in billions of $(2011)

	Non-climate			Climate			Combined		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Coal	$7.88	$88.40	$226.06	$6.29	$20.33	$43.41	$14.17	$108.73	$269.47
Petroleum	$8.40	$72.51	$95.94	$7.93	$25.64	$54.75	$16.33	$98.15	$150.68
Natural Gas	$0.04	$1.22	$1.26	$3.46	$11.19	$23.88	$3.50	$12.40	$25.14
Total	$16.32	$162.12	$323.25	$17.67	$57.16	$122.03	$33.99	$219.28	$445.29

Tax revenues as a percent of GDP

	Non-climate			Climate			Combined		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Coal	0.052%	0.586%	1.498%	0.042%	0.135%	0.288%	0.094%	0.720%	1.785%
Petroleum	0.056%	0.480%	0.636%	0.053%	0.170%	0.363%	0.108%	0.650%	0.998%
Natural Gas	0.000%	0.008%	0.008%	0.023%	0.074%	0.158%	0.023%	0.082%	0.167%
Total	0.108%	1.074%	2.142%	0.117%	0.379%	0.808%	0.225%	1.453%	2.950%

COMPREHENSIVE TAX REFORM AND U. S. ENERGY POLICY: SUMMARY

Energy Taxes and the Fiscal Cliff

Current Tax Expenditures for Energy

The Case for Comprehensive Tax Reform

Lifting the Burden