



CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE

April 8, 2003

H.R. 6

**A bill to enhance energy conservation and research and development,
to provide for security and diversity in the energy supply for the
American people, and for other purposes**

As introduced on April 7, 2003

SUMMARY

CBO estimates that enacting H.R. 6 would increase direct spending by about \$235 million in 2004, \$34 million over the 2004-2008 period, and \$2 billion over the 2004-2013 period. In addition, CBO and the Joint Committee on Taxation (JCT) estimate that the bill would reduce revenues by about \$2.3 billion in 2004, \$13.3 billion over the 2004-2008 period, and \$17.7 billion over the 2004-2013 period. Thus, in total, enacting the bill would cost about \$19.7 billion in increased direct spending and reduced revenues over the 10-year period. CBO has not completed an estimate of the bill's costs that would be subject to appropriation.

H.R. 6 would amend existing law and establish new laws relating to energy regulation, production, consumption, and research and development. Tax provisions in H.R. 6 would enhance and create credits for the use and development of energy-efficient technologies, provide faster recovery of assets and greater credits for businesses that provide energy, and enhance and create tax credits and deductions for the production of energy.

H.R. 6 contains a number of intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA). CBO estimates that the total cost of those mandates would not exceed the threshold established in that act (\$59 million in 2003, adjusted annually for inflation).

H.R. 6 contains several private-sector mandates as defined in UMRA. One of the most costly mandates would require domestic refiners, blenders, and importers of motor gasoline to ensure that gasoline sold or dispensed to consumers in the contiguous United States contains a minimum volume of renewable fuels. CBO estimates that the cost of complying with that mandate would exceed the threshold established in UMRA (\$117 million in 2003, adjusted annually for inflation) in the fifth year that the mandate would be in effect: 2009.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

CBO's estimate of the impact of H.R. 6 on direct spending and revenues is shown in the following table. (This estimate includes all costs of the bill that would not be subject to appropriation.) The direct spending effects of this legislation fall within budget functions 270 (energy), 300 (natural resources and environment), 350 (agriculture), 800 (general government), and 950 (undistributed offsetting receipts).

BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 6 will be enacted near the beginning of fiscal year 2004. The legislation's effects on revenues and direct spending are discussed below.

Revenues

CBO estimated the revenue effects of the Division A provisions regarding the renewable fuels mandate and assessments on the electricity industry. JCT provided most of the estimates for Division D provisions. In total, JCT and CBO estimate that enacting the bill would decrease revenues by about \$2.3 billion in 2004, \$13.3 billion over the 2003-2007 period, and \$17.7 billion over the 2004-2013 period.

Division D. JCT and CBO estimates that Division D would decrease revenues by \$2.4 billion in 2004, \$14 billion over the 2004-2008 period, and \$18.2 billion over the 2004-2013 period. The basis for that estimate is described in CBO's cost estimate of H.R. 1531, as ordered reported by the House Committee on Ways and Means on April 3, 2003. The estimate was transmitted to the Congress on April 7, 2003. These provisions also would increase direct spending from the United Mine Workers of America Combined Benefit Fund by \$1 million annually.

Mandatory Electric Reliability Assessments. H.R. 6 would authorize the Federal Energy Regulatory Commission (FERC) to exercise authority over the reliability of the nation's electricity transmission system through the establishment of an Electric Reliability Organization (ERO). Under the bill, FERC would select an organization to become the ERO based on several criteria, including the ability of the organization to charge fees to end users of the electricity system. Because the ERO and the regional organizations created by it would be governmental in nature, CBO believes that the collection of these fees should be recorded as revenues in the budget. Based on information from the North American Electric Reliability Council (NERC), CBO estimates that net revenues collected by an ERO and its regional organizations would total \$75 million in 2004, \$390 million over the 2004-2008 period, and \$818 million over the 2004-2013 period.

ESTIMATED REVENUE AND DIRECT SPENDING EFFECTS OF H.R. 6

	By Fiscal Year, in Millions of Dollars									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CHANGES IN REVENUES										
Division A - Energy and Commerce										
Electric Reliability Organization (ERO) Fees Charged by ERO on Electricity Consumers	75	77	78	80	81	83	84	86	87	89
Renewable Content of Motor Vehicle Fuel Change in Gasoline Taxes	<u>0</u>	<u>52</u>	<u>94</u>	<u>67</u>	<u>77</u>	<u>-37</u>	<u>-56</u>	<u>-22</u>	<u>-208</u>	<u>-251</u>
Subtotal, Division A	75	129	172	147	158	46	28	64	-121	-163
Division D - Tax	<u>-2,350</u>	<u>-3,682</u>	<u>-4,326</u>	<u>-2,488</u>	<u>-1,131</u>	<u>-852</u>	<u>-647</u>	<u>-625</u>	<u>-919</u>	<u>-1,174</u>
Total Changes in Revenues	-2,275	-3,554	-4,154	-2,342	-973	-807	-619	-562	-1,040	-1,337
CHANGES IN DIRECT SPENDING										
Division A - Energy and Commerce										
Energy Savings Performance Contracts Estimated Budget Authority	110	174	212	249	286	359	361	434	436	508
Estimated Outlays	75	142	183	221	258	306	354	384	429	459
Electric Reliability Organization Estimated Budget Authority	100	102	104	106	108	110	112	114	116	118
Estimated Outlays	100	102	104	106	108	110	112	114	116	118
Renewable Content of Motor Vehicle Fuel Changes in Farm Program Subsidies Estimated Budget Authority	0	79	129	144	73	2	-97	-118	-169	-210
Estimated Outlays	<u>0</u>	<u>79</u>	<u>129</u>	<u>144</u>	<u>73</u>	<u>2</u>	<u>-97</u>	<u>-118</u>	<u>-169</u>	<u>-210</u>
Subtotal, Division A Estimated Budget Authority	210	355	445	499	467	471	376	430	383	416
Estimated Outlays	175	323	416	471	439	418	369	380	376	367
Division C - Resources										
Oil and Gas Leasing in the Arctic National Wildlife Reserve Estimated Budget Authority	0	0	-1,700	-1	-400	-1	-1	-1	-1	-50
Estimated Outlays	0	0	-1,700	-1	-400	-1	-1	-1	-1	-50
Royalty-In-Kind Estimated Budget Authority	1	1	1	1	1	1	1	1	1	1
Estimated Outlays	1	1	1	1	1	1	1	1	1	1

Continued

ESTIMATED REVENUE AND DIRECT SPENDING EFFECTS OF H.R. 6
Continued

	By Fiscal Year, in Millions of Dollars									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Royalty Incentives for Offshore Leases										
Estimated Budget Authority	5	8	11	14	16	14	11	8	5	3
Estimated Outlays	5	8	11	14	16	14	11	8	5	3
Royalty Relief for Marginal Wells										
Estimated Budget Authority	1	14	13	11	9	5	0	-2	-5	-5
Estimated Outlays	1	14	13	11	9	5	0	-2	-5	-5
Reimbursements for NEPA Costs										
Estimated Budget Authority	25	25	20	20	25	10	10	10	10	10
Estimated Outlays	25	25	20	20	25	10	10	10	10	10
Alternative Energy Production on the Outer Continental Shelf										
Estimated Budget Authority	0	-2	0	-2	0	-2	0	-2	0	-2
Estimated Outlays	0	-2	0	-2	0	-2	0	-2	0	-2
Royalty Relief for Specific Offshore Leases										
Estimated Budget Authority	25	25	22	0	0	0	0	0	0	0
Estimated Outlays	25	25	22	0	0	0	0	0	0	0
Changes to the Geothermal and Coal Leasing Programs										
Estimated Budget Authority	2	2	3	4	5	5	5	5	5	5
Estimated Outlays	<u>2</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
Subtotal, Division C										
Estimated Budget Authority	59	73	-1,630	47	-344	32	26	19	15	-38
Estimated Outlays	59	73	-1,630	47	-344	32	26	19	15	-38
Subtotal, Division D: Combined Benefit Fund										
Estimated Budget Authority	1	1	1	1	1	1	1	1	1	1
Estimated Outlays	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Total Changes in Direct Spending										
Estimated Budget Authority	270	429	-1,184	547	124	504	403	450	399	379
Estimated Outlays	235	397	-1,213	519	96	451	396	400	392	330

NOTES: For changes in revenues, a positive number indicates an increase in revenues, whereas a negative number indicates a decrease in revenues. For changes in direct spending, a positive number for the outlay effect indicates an increase in outlays whereas a negative number indicates a decrease in outlays.

NEPA = National Environmental Policy Act.

Renewable Fuels Mandate. Section 17101 of the bill would require that motor fuels sold by a refiner, blender, or importer contain specified amounts of renewable fuel. The required volume of renewable fuel would start at 2.7 billion gallons in 2005 and escalate to 4.2 billion gallons by 2013. The bill also would amend the Clean Air Act to eliminate the requirement for gasoline that is sold in certain regions to contain 2 percent oxygen by weight. This provision would lower demand for gasoline oxygenates, including ethanol. CBO expects that most of the fuel produced to meet the requirements under the act would be corn-based ethanol. Because ethanol-blended fuels are taxed at a lower rate than gasoline, receipts to the Highway Trust Fund from motor fuels would change when ethanol use changes. We estimate that enacting this provision would increase revenues over the 2005-2008 period because the mandated level of ethanol use under the bill would be less than CBO's projection of ethanol use under current law. Under current law, we expect ethanol use to grow as the demand for gasoline oxygenates increases. After 2008, the amount of ethanol use mandated under the bill would exceed the projections in our current-law baseline—leading to a loss of revenues. We estimate that the provision would increase net federal revenues by \$290 million over the 2005-2008 period and reduce them by \$284 million over the 2005-2013 period.

Direct Spending

H.R. 6 contains several provisions that would affect direct spending and offsetting receipts (a credit against direct spending). In total, CBO estimates that these provisions would increase direct spending by \$235 million in 2004, \$34 million over the 2004-2008 period, and about \$2 billion over the 2004-2013 period. Major provisions are described below.

Energy Savings Performance Contracts (ESPCs). Section 11006 of H.R. 6 would provide permanent authorization to use ESPCs and would expand their use. The expansion would allow agencies to use an ESPC to construct replacement buildings by committing to pay private contractors a portion of the budget savings expected from reduced operations, maintenance, and energy costs at such new buildings. CBO estimates that this provision would cost \$75 million in 2004, \$879 million over the 2004-2008 period, and \$2.8 billion over the next 10 years.

Oil and Gas Leasing in the Arctic National Wildlife Refuge (ANWR). Title IV of Division C of the bill would direct the Secretary of the Interior to implement an oil and gas leasing program for the coastal plain of ANWR. CBO estimates that such a program would generate gross receipts totaling roughly \$4.3 billion over the 2006-2013 period. Under the bill, Alaska would receive half of that amount; hence, we estimate that net receipts to the federal government would total about \$2.15 billion over that period.

Electric Reliability Organization. Based on information from NERC, CBO estimates that the newly formed ERO and its regional affiliates would spend between \$75 million and \$150 million a year. For this estimate, CBO assumes that spending by the ERO and its regional affiliates would start at \$100 million a year and increase by the rate of anticipated inflation. Thus, we estimate that spending by the ERO would total about \$100 million in 2004, \$520 million over the 2004-2008 period, and \$1.1 billion over the next 10 years. As noted above (under the "Revenues" section), CBO believes the ERO's collections and spending should be included in the federal budget because this new entity would conduct inherently governmental activities that could not be undertaken by a purely private organization.

Effect of Renewable Fuel Incentives on Farm Programs. The bill would require that motor fuels sold by a refiner, blender, or importer contain specified amounts of renewable fuel. The required volume of renewable fuel would start at 2.7 billion gallons in 2005 and escalate to 4.2 billion gallons by 2013. The bill would also amend the Clean Air Act to eliminate the requirement for gasoline that is sold in certain regions to contain 2 percent oxygen by weight. This provision would lower demand for gasoline oxygenates, including ethanol.

Because ethanol is primarily derived from corn, demand for corn would fall or rise with the demand for ethanol. Lower prices for corn during the 2005-2008 period and higher prices for corn during the 2009-2013 period would result. Accordingly, the costs of farm price and income supports would slightly increase in the first few years but fall in the later years of the estimate period. On net, CBO estimates that spending for farm price and income supports would decline by \$167 million over the 2005-2013 period due to the elimination of the oxygenate requirement for motor fuels and the ethanol mandate.

Provisions Related to Natural Resources. Division C of H.R. 6 would make several changes to federal programs related to the production of oil, natural gas, hydropower, geothermal resources, and coal. Several of these provisions would provide producers of those resources with various forms of royalty relief or other credits that would reduce federal receipts. In total, CBO estimates that these provisions would reduce offsetting receipts by \$59 million in 2004, \$306 million over the 2004-2008 period, and \$414 million over the next 10 years.

ESTIMATED IMPACT ON STATE AND LOCAL GOVERNMENTS

H.R. 6 contains a number of intergovernmental mandates as defined in the Unfunded Mandates Reform Act. CBO estimates that the total cost of those mandates would not exceed the threshold established in that act (\$59 million in 2003, adjusted annually for inflation).

ESTIMATED IMPACT ON THE PRIVATE SECTOR

H.R. 6 contains several private-sector mandates as defined by UMRA. One of the most costly mandates would require domestic refiners, blenders, and importers of motor gasoline to ensure that gasoline sold or dispensed to consumers in the contiguous United States contains a minimum volume of renewable fuels.

CBO expects that the renewable requirement would be met in 2005 through 2008 without additional costs by the industry. However, CBO estimates that the direct costs of the renewable fuel requirement would rise to about \$140 million in fiscal year 2009, the fifth year that the mandate is in effect. The bill also would establish a credit trading program for renewable fuels. The program would allow producers who use more ethanol than would be required to sell credits to producers who would be in deficit. Excess credits from one year can be used in the next. Assuming that producers do not generate excess credits in 2008, the costs of complying with the renewable fuel requirement in 2009 would exceed the annual threshold established by UMRA in that year (\$117 million in 2003, adjusted annually for inflation).

PREVIOUS CBO ESTIMATES

On April 7, 2003, CBO transmitted a cost estimate for H.R. 1531, the Energy Tax Policy Act of 2003, as ordered reported by the House Committee on Ways and Means on April 3, 2003. Our estimate of the impact of that legislation is identical to our estimate for Division D of H.R. 6.

Also on April 7, 2003, CBO transmitted a cost estimate for H.R. 1346, the Federal Government Energy Management Improvement Act, as ordered reported by the House Committee on Government Reform on March 20, 2003. Provisions in that legislation and H.R. 6 that would permanently authorize and expand federal agencies' use of ESPCs are substantively similar, and our cost estimates are the same.

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