



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

July 13, 2007

H.R. 2337

Energy Policy Reform and Revitalization Act of 2007

As ordered reported by the House Committee on Natural Resources on June 13, 2007

SUMMARY

H.R. 2337 would establish a framework of national strategies to protect natural resources affected by the production, distribution, and use of energy. The bill also would revise programs managed by the Department of the Interior (DOI) to promote and regulate the production and transmission of alternative energy (such as solar or wind power) on federal lands.

Assuming appropriation of the necessary or authorized amounts, CBO estimates that implementing this legislation would result in new discretionary spending of \$2.6 billion over the 2008-2012 period. In addition, H.R. 2337 would affect direct spending by establishing new fees and repealing existing mandatory spending programs. We estimate that the net effect of such changes would be a \$52 million reduction in direct spending in 2008 and a \$431 million reduction over the next 10 years. Enacting H.R. 2337 would have no significant impact on revenues.

H.R. 2337 contains no intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA); state and tribal governments would benefit from grants authorized by the bill.

H.R. 2337 would impose a private-sector mandate, as defined in UMRA, on certain oil, gas, and coal operators that hold onshore federal leases by requiring those operators to pay a fee for land not in production. Based on information from the Bureau of Land Management (BLM), CBO estimates that the direct cost of the mandate would be about \$30 million in 2008. As those existing leases expire, the cost of the mandate would decrease in subsequent years. Consequently, the cost of the mandate would fall below the annual threshold established by UMRA for private-sector mandates (\$131 million in 2007, adjusted annually for inflation).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 2337 is summarized in Table 1. The costs of this legislation fall within budget functions 270 (energy), 300 (natural resources and environment), and 950 (undistributed offsetting receipts).

TABLE 1. BUDGETARY EFFECTS OF H.R. 2337

	By Fiscal Year, in Millions of Dollars				
	2008	2009	2010	2011	2012
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Estimated Authorizations	352	538	683	828	944
Estimated Outlays	156	330	529	709	841
CHANGES IN DIRECT SPENDING^a					
Estimated Budget Authority	-48	-49	-50	-51	-52
Estimated Outlays	-52	-54	-50	-51	-52

a. Changes in direct spending through 2017 are detailed in Table 3.

BASIS OF ESTIMATE

CBO estimates that implementing H.R. 2337 would result in discretionary spending of \$2.6 billion over the 2008-2012 period, assuming the appropriation of the necessary funds. In addition, CBO estimates that the bill would decrease net direct spending by \$431 million over the 2008-2017 period. The bill also could increase revenues by establishing civil penalties for violations of laws regarding oil and gas leasing royalties, but we estimate that any increase would be less than \$500,000 annually.

For this estimate, CBO assumes that the legislation will be enacted near the beginning of fiscal year 2008 and that the entire amounts authorized by the bill or estimated to be necessary will be appropriated each year. Estimated outlays are based on historical spending patterns for existing or similar programs. The estimate is based on information provided by the affected federal agencies.

Spending Subject to Appropriation

H.R. 2337 would:

- Direct agencies within the Departments of Commerce, Agriculture, and the Interior to establish national strategies to protect natural resources from the effects of global warming and other environmental impacts of energy production, transmission, and use;
- Authorize or reauthorize grants to states and tribes for specified natural resource programs, including coastal zone management projects;
- Require new programs and regulations concerning the development and transmission of energy, including wind and solar power, on public lands and waters; and
- Authorize appropriations for three studies concerning the production of wind energy and the storage of carbon.

Estimates of discretionary spending are detailed in Table 2 and discussed below.

Natural Resources Strategies and Systems. H.R. 2337 would authorize three major programs to protect natural resources: a National Policy and Strategy to Protect Wildlife from the Effects of Global Warming; an Ocean Policy, Global Warming, and Acidification Program; and a National Integrated Coastal Ocean Observation System.

National Policy on Wildlife and Global Warming. Section 454 would direct DOI to create and implement a national strategy for assisting wildlife populations and their habitats to adapt to global warming. The costs of carrying out section 454 are uncertain because the affected federal agencies have not completed the necessary plans or undertaken sufficient research to allow detailed estimates. CBO expects that a basic program to develop a national strategy, design in-house research and conservation programs, and manage grants to states and others would cost \$15 million in 2008 and \$285 million over the 2008-2012 period. Most of those amounts would be used by the U.S. Fish and Wildlife Service (USFWS) and other DOI agencies, the National Oceanic and Atmospheric Administration (NOAA), and the Forest Service. This estimate is based on the cost of implementing other nationwide, comprehensive programs such as the North American Waterfowl Conservation Plan. It does not include potential expenditures to acquire land for wildlife habitat, as would be authorized by the bill. Depending on the location and size of such acquisitions and the appropriation of funding for that purpose, the costs could be significant. However, it is unlikely that such costs would be incurred over the next five years.

TABLE 2. ESTIMATED DISCRETIONARY SPENDING UNDER H.R. 2337

	By Fiscal Year, in Millions of Dollars				
	2008	2009	2010	2011	2012
Natural Resource Strategies and Systems					
National Policy on Wildlife and Global Warming					
Estimated Authorization Level	40	60	90	80	80
Estimated Outlays	15	30	60	90	90
Ocean Policy, Global Warming, and Acidification Program					
Estimated Authorization Level	10	15	20	25	25
Estimated Outlays	5	10	15	20	25
National Integrated Coastal and Ocean Observation System					
Estimated Authorization Level	100	250	350	500	600
Estimated Outlays	50	155	260	380	485
Subtotal					
Estimated Authorization Level	150	325	460	605	705
Estimated Outlays	70	195	335	490	600
Authorizations for Grant Programs					
USFWS State and Tribal Wildlife Grants					
Estimated Authorization Level	70	70	70	70	70
Estimated Outlays	5	20	50	65	70
Coastal Zone Management Grants					
Estimated Authorization Level	61	61	61	61	61
Estimated Outlays	20	42	61	61	61
Subtotal					
Estimated Authorization Level	131	131	131	131	131
Estimated Outlays	25	62	111	126	131
Energy Development and Other Federal Activities					
Increased Audits of Oil and Gas Leases					
Estimated Authorization Level	10	20	30	30	30
Estimated Outlays	8	12	20	30	30
Bureau of Land Management Regulatory Programs					
Estimated Authorization Level	32	33	34	35	36
Estimated Outlays	26	33	34	35	36
Water Desalination Research					
Estimated Authorization Level	10	10	10	10	10
Estimated Outlays	10	10	10	10	10

Continued

TABLE 2. Continued.

	By Fiscal Year, in Millions of Dollars				
	2008	2009	2010	2011	2012
Oil Shale Impact Assistance					
Estimated Authorization Level	0	0	0	0	25
Estimated Outlays	0	0	0	0	25
Other Federal Activities					
Estimated Authorization Level	5	5	5	5	5
Estimated Outlays	5	5	5	5	5
Subtotal					
Estimated Authorization Level	57	68	79	80	106
Estimated Outlays	49	60	69	80	106
Studies					
Authorization Level	14	14	13	12	2
Estimated Outlays	11	13	14	13	4
Total Spending Subject to Appropriation					
Estimated Authorization Level	352	538	683	828	944
Estimated Outlays	155	330	529	709	841

Ocean Policy, Global Warming, and Acidification Program. Section 471 would direct the National Oceanic and Atmospheric Administration (NOAA) to develop and implement a national strategy to respond to the effects of global warming on oceans and coastal areas. The costs of carrying out this program are also uncertain, but based on the costs of implementing programs of similar scope such as the coastal zone management program and the endangered species program, CBO estimates that carrying out section 471 would cost \$5 million in 2008 and \$75 million over the 2008-2012 period. We expect that most of those amounts would be spent for planning and research.

National Integrated Coastal and Ocean Observation System. Section 473 would direct the National Ocean Research Council to develop and operate an integrated coastal and ocean observation system. The system would conduct ocean monitoring, data collection, analysis, public education, and research.

Based on projections and plans developed by the U.S. Commission on Ocean Policy, CBO estimates that developing the infrastructure for a fully integrated system would require the expenditure of about \$200 million over the next two years. This amount would be used to improve existing systems operated by federal agencies such as NOAA, establish regional observing systems, and develop new sensor technologies, forecasting models, and other system products. CBO expects that initial system operating costs would commence in 2010;

once fully operational (by 2012), the system would require annual funding of about \$600 million. In total, we estimate that outlays for the system would be \$50 million in 2008 and \$1.3 billion over the 2008-2012 period.

Grant Authorizations or Reauthorizations. The bill would codify an existing grant program for wildlife conservation and would authorize new grants under the coastal zone management (CZM) program, as discussed below.

State and Tribal Wildlife Grants. Section 461 would establish a permanent authorization of whatever amounts are necessary for the USFWS's wildlife conservation grant program. Based on the enacted funding level for such grants in recent years, CBO estimates that the USFWS would spend \$5 million in 2008 and \$210 million over the 2008-2012 period to provide grants to eligible states and tribes.

Coastal Zone Management (CZM) Grants. The bill would amend the Coastal Zone Management Act to authorize two new purposes for CZM grants—surveys of state (or adjacent federal) waters to determine their suitability for developing alternative energy resources and planning and developing strategies for addressing climate change. The bill would authorize the appropriation of whatever amounts are necessary for such grants. CBO estimates that providing grants to all eligible states for the newly authorized purposes would cost \$20 million in 2008 and \$245 million over the 2008-2012 period. For this estimate, we assume that each of the 35 coastal states with approved CZM plans would receive \$750,000 for alternative energy surveys and \$1 million for climate-change planning.

Energy Development and Other Federal Activities. Several provisions of the bill would affect federal programs carried out by DOI and NOAA. Major provisions are described below.

Increased Audits of Oil and Gas Leases. Section 202 would require the Minerals Management Service (MMS) to perform at least 550 audits of oil and gas leases each fiscal year. Based on information provided by DOI, CBO estimates that hiring, training, and equipping the nearly 200 additional auditors and supervisors needed to perform the additional audits would cost \$8 million in 2008 and \$100 million over the 2008-2012 period, assuming appropriation of the necessary amounts.

BLM Activities. CBO estimates that implementing H.R. 2337 would increase discretionary outlays by \$26 million in 2008 and by \$162 million over the 2008-2012 period. We estimate that most of those amounts—\$23 million in 2008 and \$147 million over the 2008-2012 period—would be spent from appropriated funds needed to replace existing direct spending. Section 101 would repeal the authority to spend, without further appropriation, certain

receipts from rental payments on onshore mineral leases. Those funds are used to administer applications for drilling-related permits.

Under the bill, we estimate that BLM would spend an additional \$3 million a year to carry out various energy and regulatory programs, including developing guidelines on best practices for oil and gas development, creating an inventory of carbon dioxide on leased federal lands, promulgating regulations to protect certain landowners from the effects of drilling underneath their property, and establishing a pilot program for developing solar energy resources on federal lands.

Water Desalination Research. Section 303 would require DOI to implement a program to research methods to use reverse osmosis technology for water desalination and other water-treatment activities. Based on the level of funding provided to the Bureau of Reclamation for similar research in the past, CBO estimates that the agency would spend \$8 million for the required research program in 2008 and \$50 million over the 2008-2012 period.

Oil Shale Community Impact Assistance. The bill would establish a new fund to be credited with certain receipts from federal leases for oil shale. The bill would authorize DOI to make payments from the fund subject to appropriation to certain state and local governments for use in planning, constructing, and maintaining public property. Based on information from DOI on the likely timing of federal lease sales for oil shale and the anticipated magnitude of receipts from such sales, CBO estimates that making such payments would cost \$25 million in 2012.

Other Provisions. H.R. 2337 would require federal agencies to complete numerous studies and reports, conduct pilot projects, and establish national guidelines and regulations for addressing global warming. CBO estimates that carrying out those requirements would cost \$5 million in 2008 and about \$25 million over the 2008-2012 period.

Studies. The bill would authorize specific appropriations for three programs:

- Section 232 would authorize the appropriation of \$2 million for each of fiscal years 2008 through 2015 for research on the impact to wildlife of producing wind energy.
- Section 403 would authorize the appropriation of \$30 million over the 2008-2012 period for a national assessment by the U.S. Geological Survey (USGS) of geological formations in the United States and their potential capacity for storing carbon dioxide.
- Section 424 would authorize the appropriation of \$15 million over the 2008-2012 period for a USGS study to determine the potential for increasing carbon storage underground.

Assuming appropriation of the authorized amounts, CBO estimates that completing those three studies would cost \$11 million in 2008 and \$55 million over the 2008-2012 period.

Direct Spending

Several provisions of the bill would amend the Department of the Interior's authority to collect and spend offsetting receipts from energy and mineral development on federal lands. The legislation's estimated effect on direct spending over the next 10 years is shown in Table 3. Major provisions that would affect direct spending are described below.

BLM Fees for Onshore Oil and Gas Drilling Permits. The Energy Policy Act of 2005 (EPAcT) established a pilot program to better coordinate federal agencies' efforts to review and process applications for drilling-related permits under federal onshore mineral leases. For that program, EPAcT authorizes BLM to spend, without further appropriation, one-half of rental payments collected from onshore lessees. Until the pilot program ends in 2015, EPAcT prohibits BLM from charging fees to recover costs to administer drilling-related permits.

H.R. 2337 would repeal BLM's authority to spend rental payments for the permit coordination pilot program. Based on anticipated levels of such payments and historical spending patterns for administrative activities, CBO estimates that reductions in direct spending would total \$23 million in 2008 and \$261 million over the next 10 years. (We also estimate that eliminating BLM's direct spending authority would require additional discretionary appropriations to administer applications for drilling-related permits, as described earlier in the section on "Spending Subject to Appropriation.")

H.R. 2337 also would require BLM to charge a fee of \$1,700 for all drilling-related permits. CBO expects that this provision would increase offsetting receipts (a credit against direct spending) during the 2008-2015 period when the prohibition on such fees would otherwise be in effect. Based on information from BLM about the anticipated volume of applications, CBO estimates the proposed fee would reduce direct spending by \$17 million in 2008, \$85 million over the 2008-2012 period, and \$136 million over the 2008-2015 period.

TABLE 3. ESTIMATED CHANGES IN DIRECT SPENDING FROM ENACTING H.R. 2337

	By Fiscal Year, in Millions of Dollars										2008- 2008-	
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2012	2017
Repeal of BLM Spending												
Authority of Rental Payments												
Estimated Budget Authority	-29	-30	-31	-32	-33	-34	-35	-36	0	0	-155	-260
Estimated Outlays	-23	-30	-31	-32	-33	-34	-35	-36	-6	0	-149	-260
Collections of BLM Drilling												
Permit Fees												
Estimated Budget Authority	-17	-17	-17	-17	-17	-17	-17	-17	0	0	-85	-136
Estimated Outlays	-17	-17	-17	-17	-17	-17	-17	-17	0	0	-85	-136
Changes in MMS Royalty												
Management												
Estimated Budget Authority	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-10	-20
Estimated Outlays	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-10	-20
BLM Due Diligence Fee												
Offsetting Receipts												
Estimated Budget Authority	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-150	-300
Estimated Outlays	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-150	-300
Spending of Offsetting Receipts												
Estimated Budget Authority	30	30	30	30	30	30	30	30	30	30	150	300
Estimated Outlays	20	25	30	30	30	30	30	30	30	30	135	285
Net Effect, Due-Diligence												
Fees												
Estimated Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
Estimated Outlays	-10	-5	0	0	0	0	0	0	0	0	-15	-15
Total Changes in Direct Spending												
Estimated Budget Authority	-48	-49	-50	-51	-52	-53	-54	-55	-2	-2	-250	-416
Estimated Outlays	-52	-54	-50	-51	-52	-53	-54	-55	-8	-2	-259	-431

Changes in MMS Royalty Management. CBO estimates that enacting H.R. 2337 would reduce direct spending by MMS by about \$2 million a year. Most of the estimated savings would result from the repeal of provisions that require MMS to pay interest to lessees if they overpay royalties. According to MMS, such interest payments totaled about \$10 million over the 2001-2006 period.

The legislation also would require most lessees to pay royalties in cash, rather than making in-kind payments in the form oil, gas, or other fuel. Under this bill, MMS could accept in-kind payments only when royalty oil is needed to fill the Strategic Petroleum Reserve. Based on information regarding MMS's existing royalty-in-kind (RIK) program, CBO estimates that this change would have a negligible effect on the government's net income from royalties. Although more than half of the royalties from the Outer Continental Shelf are currently paid in-kind, MMS reports indicate that the estimated difference in collections between the two methods has been very small—about two-tenths of one percent over the last three years—after adjusting for the direct spending for the RIK program's administrative costs. Whether either approach will yield higher or lower collections in the future is difficult to predict because of uncertainty regarding market conditions, contract terms, and the availability of information to verify the relative merits of each approach. Thus, CBO estimates that implementing this provision would have no significant net effect on direct spending over the 2008-2017 period.

BLM Due Diligence Fee. Section 224 would require BLM to establish a fee of \$1 per acre on all nonproducing onshore oil and gas leases within 180 days after enactment. The agency would be authorized to use the proceeds from the fee, without further appropriation, to repair damage to federal lands caused by oil and gas development under the Healthy Lands Initiative or for certain innovative energy projects. CBO estimates that enacting this provision would increase offsetting receipts (a credit against direct spending) by \$30 million a year beginning in 2008. We estimate that the net effect of the new fees and associated spending would be a net decrease in direct spending of \$10 million in 2008, \$15 million over the 2008-2012 period, and \$15 million over the 2008-2017 period—reflecting a short lag between the collection of new fees and their expenditure.

Revenues

H.R. 2337 would establish new civil penalties for violations of law regarding oil and gas leasing royalties. Enforcing the new penalty provisions of the bill could result in additional revenues, but CBO estimates that such increases would be less than \$500,000 a year.

ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS

H.R. 2337 contains no intergovernmental mandates as defined in UMRA. The bill would authorize grants to state, local, or tribal governments for a number of programs including assistance for surveying coastal zones and coastal waters to identify potential areas for energy exploration and production; grants for state and tribal wildlife programs; and, grants to coastal states for developing resiliency plans related to climate change. Some of those

grants would require matching contributions, but any additional costs to state or tribal governments would be incurred voluntarily. State and local governments also could receive payments from the Oil Shale Community Impact Assistance Fund that would be established by the bill.

ESTIMATED IMPACT ON THE PRIVATE SECTOR

H.R. 2337 would impose a private-sector mandate, as defined in UMRA, on certain oil, gas, and coal operators that hold onshore federal leases by requiring those operators to pay \$1 for each acre of land that is not in production for a given year. The fee would apply to new and existing onshore federal leases. Operators entering into a new lease after the fee has been established would do so voluntarily, and thus this provision would not constitute a mandate for those operators. However, operators with existing federal leases would be required to pay a fee that is not a duty under their current lease agreements. The new requirement for those operators would be considered a mandate under UMRA. Based on information from BLM, CBO estimates that the direct cost of the mandate would be about \$30 million in 2008. As those existing leases expire, the cost of the mandate would decrease in subsequent years. Consequently, the cost of the mandate would fall below the annual threshold established by UMRA for private-sector mandates (\$131 million in 2007, adjusted annually for inflation).

ESTIMATE PREPARED BY:

Federal Costs:

Natural resources programs: Deb Reis

Offshore leasing: Kathleen Gramp

Onshore leasing: Megan Carroll

Impact on State, Local, and Tribal Governments: Leo Lex

Impact on the Private Sector: Craig Cammarata

ESTIMATE APPROVED BY:

Peter H. Fontaine

Deputy Assistant Director for Budget Analysis