

## New Energy Frontier

Collectively, the actions we have taken in the past 11 months are opening a new frontier for renewable energy production in America. We will have more clean power, more investment, and more jobs.

Ken Salazar, Secretary of the Interior December 10, 2009

In 2009, Secretary Salazar began implementation of a comprehensive energy plan, making renewable energy a priority for the Department. Already, 1,000 square miles of public lands have been identified or set aside for potential development of solar energy and for siting of 5,000 miles of transmission lines. Four exploratory leases for wind energy production have been awarded on the Outer Continental Shelf. The Department of the Interior has partnered with States and other Federal agencies to expedite renewable energy projects on Interior–managed lands. These are important accomplishments that are moving the Nation to a clean energy economy and will create jobs and reduce the dependence on foreign oil.

In 2010 and 2011, Interior will continue to make progress toward a new energy frontier. The Department has a High-Priority Performance Goal:

Increase approved capacity for production of renewable (solar, wind, and geothermal) energy resources on Department of the Interior managed lands, while ensuring full environmental review, by at least 9,000 megawatts through 2011.

## **INTERIOR'S ENERGY PROGRAMS**

The New Energy Frontier initiative invests \$73.3 million in renewable energy programs, an increase of \$14.2 million over 2010. The initiative funds programs in Bureau of Land Management, Minerals Management Service, U.S. Geological Survey, and Fish and Wildlife Service that will help Interior to achieve its performance goal. It also funds programs in the Bureau of Indian Affairs that will help facilitate renewable energy development on tribal lands. The

2011 budget continues to support the development of conventional energy, with \$460.2 million in BLM, MMS, and BIA, an increase of \$13.1 million over the 2010 enacted level. The increase includes the collection of an additional \$20.0 million in inspection fees in 2011.

Renewable Energy – Interior's vast land holdings and management jurisdiction are key to realizing the Secretary's renewable energy vision. Through responsible development of onshore and offshore resources, the Department is supporting this national priority to enhance domestic supplies of clean energy. Interior's leadership in science and its knowledge of the Nation's land and water-based resources facilitates this development. Most importantly, this is being accomplished while preserving land health and without compromising resource values.



On March 11, 2009 Secretary Salazar issued a Secretarial Order establishing a framework for the

Department's renewable energy program. Since that time, significant progress has been made in developing onshore and offshore renewable programs. The BLM established four Renewable Energy Coordination Offices and six coordination teams in western States to fast-track large scale projects. The MMS has awarded the first-ever exploratory lease for renewable wind energy production on the Outer Continental Shelf offshore New Jersey and Delaware. In 2011, MMS will focus on the specific needs of the Atlantic and Pacific regions by continuing efforts to establish an Atlantic Renewable Energy Office. This office will be responsible for evaluating permits for renewable energy activities in an effective, efficient, and consistent manner, working with the States, developers, and other stakeholders to address their requests and concerns.



Conventional Energy and Compliance—The Department is using a balanced approach as it considers future oil and gas exploration and production onshore and offshore. Recently announced BLM reforms will result in new oil and gas leasing policies that require more detailed environmental reviews, greater engagement with the public, and increased coordination of interdisciplinary teams. The result is expected to be better public participation and environmental documentation, which will reduce the number of protests filed and resolve potential protest issues prior to lease sales.

During the final days in office, the previous Administration proposed a new five-year plan for oil and gas leasing to supersede the current 2007-2012 plan. Secretary Salazar extended the public comment period, solicited public input

through regional meetings, and gathered available scientific information to support decisions. The Department continues to use this inclusive approach while making additional resources available for exploration and production. In 2010, BLM will hold 38 lease sales for oil and natural gas on public lands onshore. In addition, MMS will hold an oil and natural gas lease sale for the Central Gulf of Mexico offshore, which will offer nearly 36 million acres for lease, with the potential to produce up to 1.3 billion barrels of oil and 5.4 trillion cubic feet of natural gas over 40 years.

Royalty Payments – A complete energy policy requires attention to the accurate and timely collection and distribution of royalty payments. The Department is implementing a series of reforms designed to ensure American taxpayers receive a fair return on the development of public resources. Based on the findings of an internal review, Secretary Salazar announced his intent to phase out the Royalty-in-Kind program, which allowed producers to make royalty payments with specific volumes of oil and gas in lieu of cash royalty payments. In addition, Interior has reorganized revenue management programs within MMS, improved production accountability in BLM, and strengthened auditing and compliance operations within BIA.

NEW ENERGY FRONTIER
(dollars in millions)

Program/Bureau	<u>2010</u>	<u>2011</u>	<u>Change</u>	
Renewable Energy				
BLM	16.8	19.8	+3.0	
MMS	31.7	34.9	+3.2	
USGS	3.6	6.6	+3.0	
FWS	3.0	7.0	+4.0	
BIA	4.0	5.0	_+1.0	
Subtotal	59.1	73.3	+14.2	
Conventional Energy and Compliance				
BLM	135.8	134.2	-1.7	
MMS	310.2	323.5	+13.3	
BIA	1.0	2.5	<u>+1.5</u>	
Subtotal	447.0	460.2	+13.1	
TOTAL	506.2	533.5	+27.4	

## RENEWABLE ENERGY

Interior's New Energy Frontier will harness the renewable energy potential of America's public lands. The Department manages over 500 million surface acres of public land, 700 million acres of subsurface minerals, and 1.7 billion acres on the OCS. Many of these lands and offshore areas offer extensive, untapped opportunities for development of wind, wave, solar, geothermal, hydroelectric, and biomass-based energy. Wind energy potential exists on 20.6 million acres of public land; there is solar potential on 30 million acres; and geothermal potential on over 140 million acres. The Nation's forests and rangelands offer opportunities for expanded development of biomass-based energy sources. Significant solar, wind, and wave potential also exists offshore. The New Energy Frontier is developing renewable energy projects involving all of these renewable energy sources and transmission corridors are being identified to move this clean power to areas of high demand.

The budget includes an increase of \$14.2 million to support environmentally sound development of renewable energy sources on public lands and the OCS. The request will support evaluation of the impacts of renewable energy development on wildlife and habitat and assemble the expertise needed to assess energy resources and evaluate project proposals.

SOLAR ENERGY POTENTIAL

Milliwatts (thermal)
per square meter

> 100
90 - 100
90 - 80
40 - 80
< 40

**Bureau of Land Management** – The BLM is responsible for managing public lands and regulating energy development through a program of permitting, inspection, and monitoring. The BLM's renewable energy priorities include solar, wind, and geothermal energy development.

Solar radiation levels in the Southwest are some of the best in the world, and the BLM manages 30 million acres of public lands with solar potential in the region. The BLM has received more than 220 applications for utility-scale solar energy projects in California, Nevada, Arizona, New Mexico, Colorado, and Utah. In 2009, the Department created Renewable Energy Coordination Offices in Arizona, California, Nevada, and Wyoming and six coordination teams in other western States, which are using funding from the American Recovery and Reinvestment Act to fast-track large scale renewable energy projects to create green jobs while protecting natural resources. The BLM allocated \$41.0 million in ARRA funding to facilitate 65 projects that will result in large-scale production of solar, wind, and geothermal energy, as well as the siting of transmission infrastructure on public lands to support renewable energy development.

Not all lands with energy potential are appropriate for development. The BLM reviews and approves permits and licenses from companies seeking to explore, develop, and produce renewable energy on Federal lands. The BLM is ensuring that proposed projects meet all applicable environmental laws and

regulations. The 2011 budget for renewable energy includes an increase of \$3.0 million to focus on the environmental elements of renewable energy project proposals. The BLM will use the increased funding to prepare site-specific environmental impact studies of potential solar energy sites in Nevada and regional **Environmental Impact Statements** for potential wind energy zones in Nevada and Oregon. These studies will be completed in addition to those currently under development in Arizona, New Mexico, and California. These analyses will help BLM propose future renewable energy zones and avoid areas with potential conflict. They may also lead to identification of additional fast-track projects when new renewable energy zones are designated.

For more than a decade, wind energy has been the fastest growing energy technology worldwide, achieving an annual growth rate of over 30 percent. Nearly 330 megawatts of installed capacity is located on lands managed by BLM, who also manages more than 20 million acres of land with enough wind resources to generate electricity. The BLM has identified seven fast-track projects that will harness wind resources and generate clean electricity in four western States. Once complete, these projects will provide 1,200 megawatts of electricity. The BLM recently approved a wind energy development project in Utah with an additional capacity of 120 megawatts and 15 more projects with the potential to generate 3,000 megawatts are being processed. This is enough electricity to power nearly 800,000 homes every year.



The BLM also leases public lands, including National Forest lands, for geothermal energy development. The BLM presently manages 630 geothermal leases, with 58 leases in producing status, generating 1,300 megawatts of geothermal energy from public lands. This amounts to over one-third of the United States' current geothermal energy capacity.

Minerals Management Service – The Energy Policy Act of 2005 gave MMS a significant new mandate to implement a comprehensive renewable energy program on the OCS. The Act gave MMS the authority to grant leases, easements, or rights-of-way for activities on the OCS that produce or support production, transportation, or transmission of energy from sources other than oil and gas. In 2009, the Department issued the first renewable energy framework to guide OCS development. With the regulatory framework for renewable energy established, the Department is preparing to grant leases, easements, and rights-of-way for development activities.

In 2011, MMS anticipates a substantial increase in leasing activity on OCS sites for the commercial generation of renewable energy. Numerous States have cooperative efforts and Renewable Portfolio Standards in place to facilitate the development of wind, solar, and wave energy.

The 2011 budget includes a net increase of \$3.2 million for renewable energy activities in MMS. The budget funds region-specific planning needs in energy frontier areas to attain expert knowledge of local resources, consult and collaborate with local stakeholders, and develop substantial and expansive region-specific environmental analyses. The MMS will focus efforts on the Atlantic and Pacific regions based on the expressed interest of the States and renewable energy developers.

**U.S. Geological Survey** – The USGS fulfills a key role in determining the availability and the effects of renewable energy development. The USGS conducts targeted research to provide the basis for science-based policies and decisions.

In collaboration with BLM and MMS, USGS has already provided critical scientific information regarding domestic development of renewable and conventional energy sources. The USGS cooperated with MMS to assemble and characterize the available scientific information concerning the OCS, thereby allowing the Department to simultaneously evaluate available energy and natural resources. The budget request includes an increase of \$3.0 million for USGS to analyze and document the effects of renewable energy development on wildlife populations. The USGS will focus efforts on areas with the strongest wind resources, including the Great Plains and offshore locations.

Fish and Wildlife Service – The 2011 request includes an increase of \$4.0 million to expand the ability of FWS to fulfill endangered species consultation requirements for renewable energy projects. This includes \$2.0 million for the Endangered Species Consultation program to conduct environmental reviews and thereby facilitate development of renewable energy projects; and \$2.0 million for the Conservation Planning Assistance program to enable FWS to cooperate with Federal, State, and local governments, and the renewable energy industry to ensure that priority landscape-level planning efforts include consideration of the impacts on wildlife and habitat. Proactive consultation and cooperation will limit lengthy delays as project planning nears completion and limit legal challenges that



would hinder the development of clean renewable energy sources.

Bureau of Indian Affairs – The BIA can play a significant role in achieving the Administration's goal to significantly increase U.S. renewable energy production by helping to facilitate development of more than 50 ongoing projects on tribal lands that include solar, wind, biomass, geothermal, and hydropower projects. These projects have been well received in Indian Country because Tribes are seeking ways to develop their communities using sustainable practices that include the use of renewable energy and achievement of energy efficiencies.

The New Energy Frontier initiative includes an increase of \$1.0 million to provide grants directly to Tribes to evaluate and develop renewable energy resources on tribal trust land. This funding will support 12 tribal technical assistance projects to develop renewable energy resources, creating business opportunities and jobs while increasing renewable energy supplies for local and national use. Revenue resulting from renewable energy generation will improve tribal government management and advance self-governance and self-determination.

## CONVENTIONAL ENERGY AND COMPLIANCE

The Department's conventional energy programs are an important component of the Nation's energy portfolio, supporting both economic and national security goals. Roughly one-third of the energy produced in the United States each year comes from Federal lands and waters managed by Interior.

Secretary Salazar recently announced onshore oil and gas reforms to improve certainty, reduce

conflicts, and restore balance on public lands between conventional energy development and environmental protection. The BLM will implement a program of more robust environmental reviews, greater public input, and multi-disciplinary input in order to reduce the number of formal protests.

Secretary Salazar also ordered a comprehensive review of the royalty rates from energy development on Federal lands to ensure that American taxpayers receive a fair return on the development of these resources. In 2011, Interior will initiate rulemaking to adjust onshore royalty rates. Currently, the onshore rate is 12.5 percent, as compared to an offshore rate of 18.75 percent. Adjusting the onshore rate will partially address the findings from a 2008 Government Accountability Office report, which suggests that taxpayers could be getting a better return from Federal oil and gas resources.

Production on the OCS is expected to increase as new deepwater production comes on-line with recent discoveries in the deep and ultra-deep waters of the Gulf of Mexico. The MMS also manages the revenue generated from the sale of mineral revenues, which reached nearly \$11 billion in 2009. This revenue is distributed and disbursed to 38 States, 41 Indian Tribes, some 30,000 American Indian mineral royalty owners, and to various U.S. Treasury accounts.

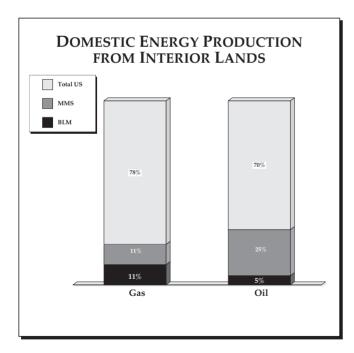
The MMS improved its revenue management operations in 2009 with a reorganization of the Minerals Revenue Management program. The new organizational structure will enhance managerial oversight and provide clear reporting responsibilities, consolidate all oil and gas production reporting and accountability functions under one organization, and improve the timeliness and accuracy of oil and gas production reports.

The 2011 budget includes a modified version of the 2010 budget proposal for a \$4 per acre per year fee on new non-producing oil and gas leases in the Gulf of Mexico. This fee would provide a financial incentive for oil and gas companies to either get leases into production or relinquish them so that tracts can be re-leased and developed by new parties. This proposal would also be expanded to apply the fee to all new Federal oil and gas leases, both onshore and offshore.

**Bureau of Land Management** – The 2011 budget maintains the BLM oil and gas program capacity at the 2010 level with total funding from discretionary and mandatory sources of approximately \$134.2

million. A reduction of \$3.0 million is proposed to reflect the completion of an energy study required by the Energy Act of 2000. In 2011, BLM will begin to charge for a portion of the inspection costs for the oil and gas program, allowing for a reduction of \$10.0 million in discretionary appropriations. The fee would defray Federal costs and ensure continued diligent oversight of oil and gas production on Federal lands. Fee levels would be based on the number of oil and gas wells per facility so that costs are shared equitably across the industry. According to BLM data, the bureau currently spends about \$40 million on compliance inspections, so the fee would cover about 25 percent of BLM inspection costs.

The BLM's program will ensure responsible development of mineral resources on public lands, using sound information to manage energy resources. The initiative includes an increase of \$2.0 million to improve air quality monitoring capabilities. The BLM will use this funding to acquire additional ozone-measuring instruments, contribute to a multi-agency air quality data warehouse, and expand its technical expertise. These tools and capabilities will assure the clean development of conventional energy resources on BLM lands.



Funding of approximately \$21.0 million continues to be available for the oil and gas program from the Permit Processing Improvement Fund in 2011. The budget proposes to repeal Section 365 of the Energy Act of 2005 in 2012 and redirect the rental income to the Treasury. The budget continues charging fees

for processing Applications for Permits to Drill, generating \$45.5 million in 2011.

Minerals Management Service - The 2011 budget includes an increase of \$4.4 million for the MMS' 2007-2012 five-year oil and gas leasing program, which will continue programs that supply 11 percent of natural gas and 25 percent of the Nation's oil. The requested increase will allow MMS to ensure fair value is received for offshore energy resources and that the increasing number of deepwater production facilities receive mandated inspections. This increase is offset by redirecting \$2.0 million from lower priority environmental studies and \$900,000 from the elimination of a Congressional earmark. The MMS anticipates a decline in offsetting rental receipts. Declines in rental receipts result primarily from fluctuations in the leasing process and the time required to begin production. The MMS uses carryover funding to minimize the year-to-year operational impacts from these fluctuations.

The 2010 appropriation established an inspection fee on above-water OCS oil and gas facilities subject to inspection, except mobile offshore drilling units. A total of \$10.0 million will be collected in 2010. In 2011, the budget proposes to increase the inspection fees total to \$20.0 million.

Responsible development of domestic energy supplies includes compliance and auditing activities to ensure revenue estimation and collection from public resources in compliance with laws, regulations, and lease terms. The 2011 MMS budget includes a net increase of \$13.1 million for audit and compliance activities, including increases to implement a series of improvements in validation, revenue collection, and oversight of energy revenue management. An increase of \$1.7 million will be used to integrate isolated revenue management systems to support compliance planning, analysis, tracking, and data management. The MMS will use \$2.0 million to ensure proper royalties are paid on transported and processed natural gas. Assuring proper royalties are paid can be complicated because the gas can originate from more than 100 index points and travel through more than 500 pipeline systems and 200 processing plants before reaching its destination. These two increases actively address long-standing recommendations from the GAO and the Office of Inspector General.

In September 2009, Secretary Salazar announced that MMS would begin an orderly termination of its Royalty-in-Kind program, which accepted oil and

natural gas from producers in lieu of cash royalty payments. Through an orderly transition over time, the Royalty-in-Kind program will be converted to a more transparent royalty collection system to increase the accuracy of the revenue management operations and ensure proper royalties are paid. The New Energy Frontier initiative includes an increase of \$10.0 million to support this increased audit effort.

Bureau of Indian Affairs – Indian Affairs works closely with Tribes to assist them with the exploration and development of 1.8 million acres with active and potential energy resources. The budget contains a \$1.5 million increase for conventional energy leasing activities on the Fort Berthold Reservation, which sits atop the Bakken Basin, one of the most prolific oil and gas producing areas in the United States. The BIA will also cooperate with BLM, MMS, and the Office of the Special Trustee for American Indians to create a virtual one-stop shop to increase coordination and expedite conventional energy development on the Fort Berthold Reservation in North Dakota.

