



U.S. Department of Agriculture



Office of Inspector General  
Midwest Region

# Audit Report

## Implementation of Renewable Energy Programs in USDA

Report No. 50601-0013-Ch  
August 2008

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UNITED STATES DEPARTMENT OF AGRICULTURE  
OFFICE OF INSPECTOR GENERAL  
Washington D.C. 20250



August 14, 2008

REPLY TO

ATTN OF: 50601-0013-Ch

TO: Thomas C. Dorr  
Under Secretary  
Rural Development

THROUGH: John M. Purcell  
Director  
Financial Management Division

FROM: Robert W. Young /s/  
Assistant Inspector General  
for Audit

SUBJECT: Implementation of Renewable Energy Programs in USDA

This report presents the results of our audit of the Department of Agriculture's renewable energy activities. Our audit evaluated the Department's key internal controls, as well as individual agency efforts to promote renewable energy projects, monitor program activities, and determine the effectiveness of renewable energy projects.

The Department's response to the draft report, dated August 13, 2008, is included as exhibit B, with excerpts and the Office of Inspector General's position incorporated into the relevant sections of the report. Based on the response, we have reached management decision on all recommendations in the report. Please follow your agency's internal procedures in forwarding documentation for final action to the Office of the Chief Financial Officer.

We appreciate the courtesies and cooperation extended to us by your staff during the audit.

# Executive Summary

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## Results in Brief

This report presents the results of our audit of the U.S. Department of Agriculture's (USDA) efforts to support renewable energy activities. We initiated this audit because the President and Congress have emphasized the urgent need for our nation to reduce its dependency on foreign oil and cut greenhouse gas emissions. This was emphasized through the Energy Policy Act of 2005,<sup>1</sup> the Advanced Energy Initiative in 2006, and the Energy Independence and Security Act signed in December 2007.<sup>2</sup> Additionally, in May 2007, the President directed USDA and other agencies to create regulations that would cut gasoline consumption 20 percent over the next 10 years and reduce greenhouse gas emission from motor vehicles. We expect this emphasis to continue in the future. For instance, the 2008 Farm Bill, which was pending at the time of our review, includes energy provisions.

The Biomass Research and Development Act of 2000<sup>3</sup> and the 2002 Farm Bill, Title IX, Energy<sup>4</sup> also significantly affected USDA's role in promoting renewable energy. Through this legislation, Congress charged USDA with a leadership role towards advancing renewable energy activities, particularly in the biomass field. This included tasking USDA and the Department of Energy (DOE) to coordinate renewable energy activities Governmentwide through the Biomass Research and Development Board.

In December 2005, the Secretary of Agriculture established an Energy Council within USDA. The Energy Council's primary role is to assist the Secretary in developing policy and coordinating renewable energy activities. For instance, it supported USDA's leadership role within the Federal Government by coordinating, along with DOE, the Advancing Renewable Energy conference in St. Louis, Missouri, in October 2006, which included the President as a guest speaker. That conference sought to build and strengthen partnerships that would accelerate the commercialization of domestic renewable energy industries.

We focused much of our attention on USDA's renewable energy activities immediately preceding and subsequent to the enactment of the Energy Policy Act and the President's Advanced Energy Initiative. In fiscal years (FY) 2006 and 2007, USDA reported over \$214 million and \$197 million, respectively, in renewable energy activities to the Office of Management and Budget (OMB). Of this amount, Congress appropriated over \$61 million and \$76 million, respectively, specifically for renewable energy activities

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<sup>1</sup> Public Law (PL) 109-058.

<sup>2</sup> PL 110-140.

<sup>3</sup> PL 106-224, as amended by PL 109-58.

<sup>4</sup> *Farm Security and Rural Investment Act*, PL 107-171.

legislated through Title IX of the 2002 Farm Bill. Agency managers distributed the remaining \$153 million and \$121 million, respectively, from existing program resources.

Our audit objective was to evaluate USDA's efforts to emphasize renewable energy activities as directed by existing legislation and the President's Initiative. We found that USDA agencies funded many worthwhile projects that had a positive impact in the renewable energy area. However, we identified several issues that, if addressed, could improve USDA's efforts in reducing the nation's dependence on foreign oil and in powering its homes and businesses with renewable energy sources. Those issues are summarized in the following sections.

#### Departmentwide Renewable Energy Strategy Needed

USDA does not have a renewable energy strategy for all agencies and programs within the Department. Such a strategy should include program goals for agency managers, a detailed course of action to accomplish those goals, and measures to evaluate performance. In March 2008, the Department issued a strategy related to research, education, and extension services. However, that strategy does not include agencies and programs that fund renewable energy commercial projects.

Without a strategy that includes all agencies and programs within the Department, agency managers independently (1) determine funding priorities, (2) develop selection criteria, and (3) assess the impact of renewable energy projects. Consequently, agency managers for programs that did not receive funds appropriated for renewable energy have not placed sufficient emphasis on projects in that area. Also, program managers have not analyzed proposed commercialization projects to identify those that would provide the most benefit for funds expended.

We asked a departmental official why more funds were not used for renewable energy projects from programs that were not appropriated funds for that purpose. The official stated that all types of projects have benefits and agencies can only fund projects based on the number of applications received. The official also stated that USDA bases its policy on flexibility rather than emphasis on a specific area. The official added that renewable energy is a complicated area, and the success of the effort is largely dependent on the private sector.

We did find that the Forest Service (FS) made an effort to place emphasis on renewable energy in two regions. FS developed a national strategy to use woody biomass and directed its regions to designate an official to coordinate efforts. Two of the nine FS regions established full-time coordinators, whose

efforts resulted in as many woody biomass grants as the other regions combined.

In FY 2006, agency managers did not noticeably increase funding from past years for renewable energy activities from programs that were not appropriated funds for that purpose. One reason is that agency managers at the Rural Utilities Service (RUS), FS, and the Natural Resources Conservation Service (NRCS) did not use criteria that gave priority to renewable energy projects. At those agencies, managers used normal program criteria based on the program's mission to select a project.

Rural Business-Cooperative Service (RBS) officials developed selection criteria for programs where funds are not appropriated for renewable energy that benefited project applications involving renewable energy. However, Rural Development officials in the two States we visited did not use the criteria. Instead, they encouraged applicants to use the Renewable Energy and Energy Efficiency Improvement (Section 9006) Program, which had funds specifically appropriated for renewable energy projects. This would not have been a concern if the Section 9006 Program had sufficient funds, which it did not, for all renewable energy applications. As a result, we found 26 eligible, but unfunded, applications at the 2 States in our review for FYs 2005 and 2006. This point is important because the number of unfunded applications nationwide increased from 182 in FY 2006 to 421 in FY 2007.

In addition, we found that none of the four agencies in our review that funded commercialization projects developed procedures to conduct analyses to identify projects that would provide the most benefit for renewable energy funds expended on the project. In the research area, we identified several Agriculture Research Service (ARS) projects that benefited already mature segments of the ethanol-producing industry rather than developing new and innovative technologies in the field of renewable energy.

Also, no agency involved in commercialization has developed procedures to analyze the results of completed projects to compare expected and actual renewable energy results. Thus, there is no method to determine if projects accomplished stated goals and whether agency collective efforts were accomplishing anything significant. Our analysis of unfunded renewable energy applications for RBS programs from FYs 2005 to 2006 disclosed that many appeared to have more potential than projects actually funded by the agency. During our audit, RBS officials stated they are developing procedures to perform such analyses for the Section 9006 Program. However, they do not have plans to develop similar procedures for programs where funds are not appropriated for renewable energy activities.

## Funds Used for Intended Purposes, but Procedures to Prevent Duplicative Funding are Absent

One important aspect of our audit work was to verify that funds reported as expended for renewable energy activities were actually used for that purpose. Another was to determine if any duplication of funding for renewable energy research and commercialization had occurred among USDA agencies. At the 6 agencies we visited, we examined records related to 137 renewable energy projects funded by the Department's various programs.<sup>5</sup> Additionally, we visited 89 commercial renewable energy projects in 7 States. Overall, we found that renewable energy funds were spent appropriately. We found no instances where funds specifically appropriated for renewable energy activities were diverted to other purposes; neither did we find any duplication of funding between individual projects.

However, we did conclude that duplicate funding and efforts could occur within the Department's programs. To date, the Department has not issued guidance on how agencies are to coordinate to prevent duplicate funding of similar renewable energy projects. There were no internal controls that compared objectives and data from funded projects to the objectives and supporting information relating to applications for proposed projects.

There are at least six agencies within the Department with programs that fund similar renewable energy projects. In the commercialization area, there are 4 agencies (RBS, RUS, FS, and NRCS) with 11 programs that fund similar types of renewable energy projects. For example, RUS' Electric Loan (EL) Program and High Energy Cost Grant (HECG) Program and three RBS Programs provided funding for wind projects. RUS' HECG and EL Programs and RBS' Section 9006 and Value-Added Producer Grants Programs all funded solar projects. Also, RBS has three programs that, along with RUS' EL Program and NRCS' Environmental Quality Incentive and Conservation Innovation Grants Programs, funded anaerobic digesters. In the research area, there are no controls in place to prevent the Cooperative State Research, Education, and Extension Service from funding research that would duplicate efforts at ARS and FS.

Moreover, we found that most agency officials are not checking for duplication of funding or efforts. Agency officials we questioned said they had not communicated with each other about specific projects being funded by their respective programs to check for duplication. Some agency officials said they checked for duplication within their own agency, however we did not find evidence of these checks. Officials at higher levels within the Department stated there were discussions about duplication but there are no procedures to check for duplication.

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<sup>5</sup> We did not review records for NRCS.

RBS is the only agency that we are aware of that contacted another Federal Department (DOE) about its commercial renewable energy activities. However, that contact was limited to sharing applicant lists for the Section 9006 Program and not activity for all agency programs.

#### Renewable Energy Funding Understated

In FY 2006, the Department reported to OMB that the seven agencies in our review had over \$207 million in renewable energy funding.<sup>6</sup> Our audit disclosed that this figure should have been reported at a much higher amount, potentially reaching \$304 million. The understatement occurred because agencies had not reported renewable energy funds according to the guidelines provided to them by the Office of Budget and Program Analysis (OBPA).

Specifically, some agency officials either had not (1) used the criteria contained in OBPA's guidance to identify renewable energy funding, (2) distributed OBPA's guidance to officials delegated the responsibility to identify renewable energy funding, or (3) performed sufficient reviews to identify renewable energy funding. We attributed these conditions to agency officials not fully understanding reporting requirements, not placing sufficient emphasis on obtaining full and complete information, and not having controls in place to ensure the information was correct.

#### USDA's Renewable Energy Outreach System Needs Modification

The Department's web-based system to promote renewable energy programs, the Energy Matrix, is confusing and did not include important program information. Also, there is no information regarding the extent of use by applicants. The Department has not ensured the clarity and accuracy of all the information and has not built measures into the system, such as a counter, to determine if the system is being used by applicants. As a result, Department officials are unable to determine the system's effectiveness. An Energy Council official stated that the system is new and still under development.

### **Recommendations In Brief**

We recommend that the Energy Council and the Office of the Under Secretary for Rural Development develop and implement a USDA renewable energy strategy for all agencies and programs within the Department. While USDA's main responsibility is not in the renewable energy field, it does have a leadership role in this area. A comprehensive Departmentwide strategy would ensure that the expected large influx of renewable energy funding in the near future would be used in the most effective manner. We also recommend that Department officials establish procedures to (1) ensure that renewable energy funding is accurately identified and reported to OMB,

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<sup>6</sup> OBPA did not include amounts for the Farm Service Agency and the Rural Utilities Service. (See Finding 3.)

(2) prevent and detect duplicate funding within USDA and other Government agencies, and (3) revise the Department's Energy Matrix.

### **Agency Response**

In their response, dated August 12, 2008, departmental officials agreed with the findings and recommendations contained in the report. We have incorporated applicable portions of the response, along with our position, in the Findings and Recommendations section of this report. The Department's response is included in its entirety as exhibit B of the report.

### **OIG Position**

We agree with the corrective actions the Department plans to take and have reached management decision on all recommendations in the report.



## ***Abbreviations Used in This Report***

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ARS	Agricultural Research Service
B&I	Business and Industry
CRIS	Current Research Information System
CSREES	Cooperative State Research, Education, and Extension Service
DOE	Department of Energy
EL	Electric Loan
FAADS	Federal Assistance Awards Data System
EQIP	Environmental Quality Incentive Program
FSA	Farm Service Agency
FS	Forest Service
FY	Fiscal Year
GLS	Guaranteed Loan System
HECG	High Energy Cost Grant
NRCS	Natural Resources Conservation Service
OBPA	Office of Budget and Program Analysis
OIG	Office of Inspector General
OMB	Office of Management and Budget
PL	Public Law
RBS	Rural Business-Cooperative Service
RBEG	Rural Business Enterprise Grant
RBOG	Rural Business Opportunity Grant
REDLG	Rural Economic Development Loan and Grant
RUS	Rural Utilities Service
Section 9006	Renewable Energy and Energy Efficiency Improvement
USDA	U. S. Department of Agriculture
VAPG	Value-Added Producer Grant
WBUG	Woody Biomass Utilization Grant

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# ***Background and Objective***

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## **Background**

Based on our nation's increasing dependence on foreign oil and its potential to cause environmental damage, the President directed members of his administration to emphasize renewable energy activities within their respective programs. Congress tasked the U.S. Department of Agriculture (USDA) to take on a leadership role in the renewable energy area as co-chair of the Governmentwide Biomass Research and Development Board.

Congress has enacted legislation in the last few years that had a significant impact on renewable energy activities within USDA. This included the Biomass Research and Development Act of 2000; the 2002 Farm Bill, Title IX, Energy; and the Energy Policy Act of 2005. In 2006, the President proposed measures and goals to change the way the nation fuels its vehicles and powers its homes and businesses through the Advanced Energy Initiative. The Initiative directly impacted USDA by calling for cellulosic ethanol to be cost competitive with corn-based ethanol by 2012.

In May 2007, the President directed USDA and other agencies to create regulations that would cut gasoline consumption and greenhouse gas emission from motor vehicles, by using his "Twenty in Ten" plan to reduce U.S. gasoline consumption by 20 percent over the next 10 years. In December 2007, the President signed the Energy Independence and Security Act, which requires fuel producers to use at least 36 billion gallons of biofuel by 2022. The 2008 Farm Bill, pending at the time of our review, also contains energy provisions.

In order to provide better renewable energy leadership, in December 2005, the Secretary of Agriculture established an Energy Council within USDA. The Energy Council is chaired by the Under Secretary for Rural Development and has four committees: Commercialization; Research and Development; International; and Communication and Outreach. As of October 2007, the Energy Council had met four times. The committees have met more frequently. In addition, the Energy Council has a Coordinating Committee, chaired by the Deputy Under Secretary for Rural Development and comprised of key senior staff from several agencies that meets weekly to coordinate departmental renewable energy activities. The primary role of the Energy Council is to assist the Secretary in developing policy and coordinating renewable energy activities within the Department.

The Energy Council developed the USDA Energy Matrix and was the impetus behind the reporting requirements of the Office of Budget and Program Analysis (OBPA) on renewable energy funding. It also supported the Department's leadership role within the Federal Government by

coordinating efforts such as the Advancing Renewable Energy conference held in St. Louis, Missouri, in October 2006.

That conference sought to help build and strengthen partnerships that will accelerate the commercialization of domestic renewable energy industries. The specific goals for the conference included:

- Identifying major issues, including partnership opportunities, facing decision makers both within Government and in the private sector;
- Identifying critical pathways to rapid deployment of renewable energy technologies, recognizing any issues affecting these pathways and then making policy recommendations for resolving these issues;
- Examining policy incentives involving tax credits, loan guarantees, expedited approval processes and other measures to increase certainty, reduce risk, and accelerate the deployment of new energy sources; and
- Joining with other stakeholders to strengthen and expand current energy infrastructure leading to the continued growth and diversification of our nation's renewable sources of energy.

OBPA, together with input from the USDA Energy Council and the Office of Management and Budget (OMB), developed guidance related to renewable energy activities for dissemination to all agencies for the purpose of compiling the Department's activities. For the period fiscal years (FY) 2001 through 2007, USDA reported over \$1.6 billion in renewable energy activities to OMB as follows:

<u>Fiscal Year</u>	<u>Reported Renewable Energy Activity (millions)</u>
2001	\$154.3
2002	\$224.6
2003	\$283.5
2004	\$293.1
2005	\$242.1
2006	\$214.2
2007	\$197.1

Between FYs 2001 and 2007, Congress appropriated over \$774 million in funds specifically for renewable energy programs legislated through the 2002 Farm Bill. Agency managers directed another \$835 million from other program funds for renewable energy purposes. The funds from both sources financed a wide range of commercial renewable energy activities including

132 ethanol and biodiesel facilities, 130 wind and 22 solar projects, 92 anaerobic digesters, and 7 landfill recovery systems.<sup>7</sup>

The Department provided more than \$112 million for renewable energy research projects in FY 2006 and almost \$545 million in incentive payments between FYs 2001 and 2006 to biodiesel and ethanol producers.

Nine USDA agencies, administering 29 programs, currently take part in renewable energy activities. (See exhibit A for a list of agencies and programs.) These agencies are:

- The Rural Business-Cooperative Service, which provides the largest outlays for renewable energy commercial projects, much of which are appropriated specifically for this purpose by Congress;
- The Rural Utilities Service, which provides funding for renewable energy projects through existing electric generation, transmission, and distribution programs;
- The Farm Service Agency, which provided incentive payments to ethanol and biodiesel producers;
- The Agricultural Research Service and the Cooperative State Research, Education, and Extension Service, which either fund or perform renewable energy research;
- The Natural Resources Conservation Service, which provides funding and technical assistance for a variety of renewable energy systems related to conservation and energy efficiency;
- The Forest Service, which provides grants for small-scale woody biomass energy systems linked to sustainable forest restoration and performs research in the renewable energy area;
- The Office of the Chief Economist, which funds biodiesel education and outreach activities, and designates and labels biobased products for preferred Federal procurement within the Federal Government; and
- Departmental Administration, which provides policy and guidance to USDA agencies to implement the alternative fuel use and petroleum reduction goals of the Energy Policy Act, and implements the BioPreferred Procurement Program within USDA.

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<sup>7</sup> 2007 Farm Bill Theme Paper, *Energy and Agriculture*, August 2006.

**Objective**

Our objective was to evaluate the Department's efforts to emphasize renewable energy activities as directed by existing legislation and the President's Advanced Energy Initiative. Specifically, we examined the Department's planning, coordination, and monitoring actions. This included an assessment of major internal controls over the eligibility, processing, and issuance of renewable energy funds.

# **Findings and Recommendations**

## **Section 1: Renewable Energy Strategy**

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### **Finding 1                      Guidance Defining Goals, Objectives, and Performance Measures Needed to Ensure Greater Emphasis on Renewable Energy Activities**

Agency managers for some programs have not (1) sufficiently emphasized renewable energy activities, (2) used selection criteria that focused on renewable energy or on the best renewable energy projects to fund, and (3) analyzed proposed and completed projects to determine those that would provide the greatest benefits. Department-level officials have not developed a renewable energy strategy for all agencies and programs within the Department that would guide agency managers and include Departmentwide goals, a detailed course of action to accomplish those goals, and measures to evaluate performance. Thus, while the Department has accomplished much over the past 5 years, it could do more to reduce our nation's dependence on foreign oil and to power our homes and businesses with renewable energy sources.

Recent legislation, in particular the Energy Policy Act of 2005, and the President's Advanced Energy Initiative emphasized the need for Federal agencies to increase program support of renewable energy activities. The President also stated that Federal agencies should support activities that provide the greatest impact on developing new sources of renewable energy. As such, we focused much of our attention on departmental activities during fiscal years (FY) 2005 and 2006.

We expect the emphasis on renewable energy to continue. In May 2007, the President directed USDA and other agencies to create regulations that would cut gasoline consumption by 20 percent over the next 10 years and greenhouse gas emission from motor vehicles. In December 2007, the President signed the Energy Independence and Security Act, which included provisions that will directly impact USDA, such as the expressed goal that 25 percent of total energy consumed should come from agriculture, forestry, and working lands by 2025. In addition, the 2008 Farm Bill, which was pending at the time of our review, includes energy provisions.

In FY 2006, agency managers of commercial and research programs that were not appropriated funds for renewable energy provided nearly \$153 million for that purpose. This was only about 3 percent of the almost \$5 billion in total expenditures from those programs. Agency managers of those programs stated that they followed requirements for making loans and grants, or determining research to fund. They did not make special provisions for renewable energy projects.

We confirmed with a Rural Development official that the Department has not instructed agency managers to make special provisions for renewable energy activities. For the Rural Business-Cooperative Service (RBS) Renewable Energy and Energy Efficiency Improvement (Section 9006) Program, which had funds appropriated for renewable energy activities, we found that agency officials had not established procedures to analyze proposed projects to ensure that the most beneficial projects were funded.

We reviewed the USDA Strategic Plan to determine the extent of the guidance it provided on renewable energy. We found that renewable energy is included in Strategic Goal 2, “*Enhance the Competitiveness and Sustainability of Rural and Farm Economies*” and in Strategic Goal 3, “*Support Increased Economic Opportunities and Improved Quality of Life in Rural America.*”<sup>8</sup> However, the methods for accomplishing these goals are broad and general and do not provide agency managers with specific actions needed to accomplish them. Some general strategies for achieving the goals are to focus existing programs to encourage increased use of biomass, biofuels, and bioproducts; increase the amount of ethanol produced through cellulosic conversion technology; and implement multiple strategies to increase the use of biobased products.

In October 2007, we discussed the issue of a specific renewable energy strategy with Rural Development officials who stated the Energy Council is developing a Departmentwide research and development strategy that will include specific goals and objectives for renewable energy. In addition, they said that the Energy Council was waiting for the Biomass Research and Development Board to issue a research and development biofuel plan and for the reauthorization of the Farm Bill before finalizing the Department’s research and development strategy.

In March 2008, despite the Biomass Research and Development Board not having issued its plan, the Department issued an overall strategy for renewable energy activities related to research, education, and extension services. However, the Energy Council has not completed a Departmentwide strategy for agencies and programs that fund renewable energy commercial development projects. At the exit conference, officials stated since the issuance of the Administration’s Farm Bill proposal, their top priority has been the reauthorization of the Farm Bill.

Without a comprehensive renewable energy strategy that includes all programs within the Department, agency managers are left to determine funding priorities, develop selection criteria, and assess the impact of renewable energy projects on their own. We had concerns with agency

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<sup>8</sup> Goal 2, Objective 2.1 “Expand Domestic Market Opportunities” has performance measures related to increasing the amount of ethanol consumed and biodiesel produced in the United States along with increasing the number of products designated under the Federal Biobased Products Preferred Procurement Program.



actions in all three of those areas. In particular, they had no strategy to target or identify where the funds should be spent and to determine what would be the most beneficial projects to fund in relation to other projects. The following sections describe our concerns in detail.

More Emphasis Could be Placed on Renewable Energy Activities in Programs Where Funds Were Not Appropriated for That Purpose

We reviewed renewable energy activities for 14 programs at 6 agencies during the period FYs 2005 and 2006 to determine the level of funding agency managers were expending in the area and to determine if they had increased funding after the Energy Policy Act and the President's Advanced Energy Initiative. (See exhibit A for programs included in our review.) We found that many agency managers had not increased funding for renewable energy activities from FYs 2005 to 2006.

The following examples indicate that the percentage of funds being expended on renewable energy projects is not very large.

- Three of the Rural Business-Cooperative Service's (RBS) five programs expended less than 7 percent of total program expenditures in FY 2006 on renewable energy projects (e.g., the Rural Business Enterprise Grant (RBEG) Program provided 1.3 percent for renewable energy projects in FY 2006).
- The Rural Utilities Service (RUS) Electric Loan (EL) Program expended no funds for renewable energy in FY 2006.
- RUS' High Energy Cost Grant (HECG) Program spent 15.6 percent of funding (\$7.3 million of \$46.8 million expended) in FY 2006 for renewable energy.
- The Agricultural Research Service (ARS) had 29 projects in the biofuel research area in FY 2006, which accounted for less than 3 percent of the agency's total research projects.
- The Forest Service (FS) expended 4.4 percent of total research expenditures on renewable energy in FY 2006 (\$12 million of \$277 million).
- The Cooperative State Research, Education, and Extension Service (CSREES) expended less than 3.3 percent of total National Research Initiative expenditures on renewable energy research during FY 2006 (\$5.45 million of \$166.8 million).

The following examples resulted from our comparison of amounts and percentages expended by agency managers prior to and after the Energy Policy Act and the President's Advanced Energy Initiative. The examples illustrate that program managers had not significantly increased renewable energy funding as a percentage of total program funding from FY 2005 to FY 2006.

- RBS' Business and Industry Loan Guarantee Program increased renewable energy activities less than 3.3 percent.
- RBS' RBEG Program increased renewable energy activities less than 1 percent.
- FS' Woody Biomass Utilization Grant (WBUG) Program increased renewable energy activities about 8 percent.
- RBS' Rural Economic Development Grant Program had a 3 percent increase in renewable energy activities.

We asked a departmental official why more funds were not used for renewable energy projects from programs that were not appropriated funds for that purpose. The official stated that all types of projects have benefits and agencies can only fund renewable energy projects based on the number of applications received. The official further stated that funding renewable energy projects is a complicated issue. The official said that USDA policy is based on flexibility rather than emphasis on a specific area and that the success of renewable energy efforts is largely dependent on the private sector.

We found that one agency, FS, made a concerted effort to place emphasis on renewable energy that we had not observed in the other agencies. FS directed its nine regions to make officials responsible for woody biomass renewable energy activities within each region. Two of the regions established full-time woody biomass energy coordinators, while the remaining regions assigned this responsibility to individuals as a collateral duty. The two full-time coordinators prioritized marketing, outreach, and organized renewable energy efforts. They disseminated as many woody biomass utilization grants as the other seven regions combined.

All of the part-time coordinators we interviewed said that soliciting participation and facilitating involvement in the program would make renewable energy efforts more effective in their regions. FS' national energy coordinator stated that full-time coordinators in each region would enhance the program's effectiveness. Based on discussions with agency managers, they have tentatively agreed with our suggestion to study the option of having a full-time renewable energy coordinator for each region. Similar efforts

could be made in other agencies with better guidance provided from the departmental level.

Another agency, RUS, placed limited emphasis on renewable energy. During the period FYs 2003 through 2006, RUS officials set aside \$800 million in loan funds for renewable energy activities from the EL Program. This was a substantial amount, although only about 5 percent of the \$15 billion in total loans for the period. However, agency officials did not expend any of the funds for renewable energy projects in FY 2006. Those officials said that they did not receive any applications for the funds.

#### Renewable Energy Selection Criteria Absent or Inadequate

Agency program managers at RUS, FS, and the Natural Resource Conservation Service (NRCS) did not use funding selection criteria that gave priority to renewable energy applications. At those agencies, managers used normal program criteria, based on a program's mission, to select a project to fund because they were not directed by the Department to give preference to renewable energy. For example, the selection criteria for the FS WBUG Program were based on the volume of hazardous fuel reduction, which is the removal and use of low-value woody biomass. Thus, a project involving the production of mulch has the same chance of funding as one involving the production of wood pellets to heat homes.

The NRCS Environmental Quality Incentive Program's (EQIP) selection criteria were based on the environmental and conservation impact of a project, not whether it had any renewable energy component. Thus, the funding of an anaerobic digester<sup>9</sup> by that program is based solely on its environmental impact and would not have a higher priority because it also had a renewable energy component.

At RBS, agency officials developed selection criteria that benefited applications involving renewable energy projects. Agency officials at the two States we visited said that the criteria were not used because they were encouraging applicants to use the Section 9006 Program, which had funds specifically appropriated for renewable energy projects. This would not have been a concern if the Section 9006 Program had sufficient funds, which it did not, for all renewable energy applications. As a result, for FYs 2005 and 2006, we found 26 eligible, but unfunded, Section 9006 applications in the 2 States in our review. This is important because the number of unfunded applications nationwide increased significantly from 182 in FY 2006 to 421 in FY 2007.

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<sup>9</sup> Anaerobic digesters use microorganisms to break down organic waste to produce a methane and carbon dioxide rich biogas suitable for energy production.

For the RBS Section 9006 Program, much of the criteria were outlined in Title IX of the 2002 Farm Bill. However, agency managers also used other criteria that were not outlined in the Farm Bill legislation for the Section 9006 Program. For example, they gave priority to an application from a small agricultural producer or a first time borrower or grantee. Consequently, all other criteria being equal, small producers were more likely to receive funding than large producers.

For projects, like wind turbines, this could make a considerable difference on the total energy output of the project. For example, our analysis disclosed that large projects averaged significantly more energy generation per dollar invested than small projects (large projects averaged 41 kilowatt hours per dollar invested while small projects averaged 3 kilowatt hours per dollar invested). In addition, State officials placed more weight on projects involving energy replacement and energy savings, as opposed to the factor of energy generation that we considered to be critical.

We questioned the adequacy of the criteria used to identify projects that would provide the greatest benefit for the funds spent. An RBS official stated that the agency included all Farm Bill provisions in the regulations and corresponding selection criteria. Thus, the agency met its obligations. In addition, the agency used criteria from other programs to consider the social and economic benefits of a project and ensure that the best projects were funded. While we agree that the agency's existing criteria are important, and should be factored into funding decisions, they do not include estimated quantity of energy to be generated per dollar invested in the renewable energy project, which we consider to be a critical factor. Using this factor would provide greater assurance that the projects with the greatest renewable energy benefits are considered for funding by the program.

#### Renewable Energy Projects Not Analyzed

We found that none of the four agencies in our review that funded commercialization projects had established procedures to analyze applications to identify those that would provide the most benefit for funds expended. In the research area, we found that three of the seven ARS projects we reviewed produced results that benefited already-mature segments of the ethanol producing industry rather than developing new and innovative technologies in the field of renewable energy. We attributed this to the fact that ARS research projects follow a 5-year cycle. During each cycle, agency officials do not analyze projects for either continued relevance or if the research involves priorities set by the Administration and Congress.

One area emphasized by both the President's Advanced Energy Initiative and the Energy Independence and Security Act of 2007 is the development of cellulosic ethanol. Unfortunately, given its 5-year cycle, ARS will not be in a

position to address this important area until 2009. Thus, instead of prioritizing research that fosters the breakthrough technologies necessary to make cellulosic ethanol cost competitive, ARS is also performing research involving mature technology. As a result, despite ARS' unique position in the agriculture research area, the agency may not be a major contributor in making cellulosic ethanol cost competitive by 2012, one of the goals outlined in the President's Advanced Energy Initiative.

For instance, one project started in 2004 was intended to improve the "dry-grinding" process of converting cornstarch to ethanol making it economically competitive with other processes and thus increasing the overall level of ethanol production. However, while this research project was proceeding through its 5-year cycle, economic conditions changed to the point where dry-grinding became the predominant method of corn ethanol production even without the benefit of ARS research. An independent panel of experts, convened by ARS in June 2007, concluded that the corn ethanol industry was now viable on its own and that little or no continued investment of public funds for research was justified. Thus, there was little to be gained by continuing this research. However, despite these findings, at the time of our audit the projects had continued uninterrupted because of ARS policy.

Another issue is that no agency established procedures to analyze the results of completed projects to compare expected and actual renewable energy outcomes. One agency, RBS, has most of the data necessary to analyze Section 9006 projects after they become operational in the Post Award Tracking System.<sup>10</sup> Agency officials stated they intended to use the system in this manner. However, they acknowledged that the system was not being used to its full potential at the time of our audit. RBS officials stated that they funded a study to review of the results of their Section 9008 Biomass Research and Development Grant Program. The study was ongoing at the time of our review.

Another agency, ARS, used personnel from outside its agency to perform a retrospective assessment of the bioenergy and energy alternative research program's success relative to goals. However, this review was done as part of ARS' planning for the next research cycle, and was not intended to assess, act on, and revise ongoing research. Without such an analysis, it is impossible to determine if projects meet original renewable energy goals. We recognize that ARS does perform annual project reports, which monitor research progress toward national priorities including research relevance. ARS officials have agreed to improve the annual reviews soliciting a more explicit report on each project's progress towards meeting national program goals.

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<sup>10</sup> The Section 9006 Program accounted for 76 percent of RBS approved renewable energy projects between FYs 2001 and 2006.

We found that officials at the seven agencies in our review did not perform analysis either before or after completion because there is no requirement or request to do such an analysis. Additionally, many projects are funded through existing programs, so agency officials do not evaluate the projects in terms of renewable energy; instead, they evaluate projects based on the mission of the program. Thus, there is no way to determine if projects accomplished stated goals or were the best ones to support. For instance, we analyzed the estimated kilowatt hours applicants expected to generate from 15 of the 26 unfunded projects at the 2 States in our review. Our analysis disclosed that 12 of the 15 unfunded projects could have provided more energy output per dollar spent than at least 53 projects actually funded in FY 2006. The unfunded project with the highest estimated energy output exceeded the estimates for 118 funded projects. RBS officials stated they are developing procedures to perform such pre-approval analyses for the Section 9006 Program. However, they do not have plans to develop similar procedures for programs where funds are not appropriated for renewable energy activities.

The conditions described in this finding could be corrected through a departmental strategy that provides specific actions related to renewable energy activities for all agencies and programs. A comprehensive strategy should include Departmentwide goals, a plan for agencies to follow in achieving those goals, a means of obtaining and measuring program results, and a comparison of project results to established goals. Without such a strategy, it will be difficult for the Department to achieve goals such as those related to the development of cellulosic ethanol.

## **Recommendation 1**

Develop and implement a strategy for renewable energy activities for all agencies and programs within the Department that includes goals, a plan for agencies to follow in achieving those goals, a means of obtaining and measuring program results, and a comparison of project results to established goals.

### **Agency Response**

The Department will elevate renewable energy planning within the context of the current strategic planning process as detailed below:

An inter-agency working group reporting to the USDA Energy Council will develop recommendations for identifying renewable energy programs and incorporating specific renewable energy planning and reporting targets (including performance measures), and priorities identified by the Biomass Research and Development Board, for inclusion in the 2011-2015 Strategic Plan. This group will be identified by September 30, 2008, and will submit

recommendations to the Energy Council by May 1, 2009, so that they can be fully included for departmental preparations for the 2011-2015 Strategic Plan.

**OIG Position**

We accept management decision for this recommendation. Final action can be achieved once a copy of the inter-agency working group's recommendations is provided to the Office of the Chief Financial Officer (OCFO).

## Section 2: Duplication of Funding

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### Finding 2

#### **Funds Used for Intended Purposes, but Policies and Procedures to Prevent Duplicative Funding are Absent**

One important aspect of our audit work was to verify that funds reported as expended for renewable energy activities actually were used for those purposes. Another was to determine if any duplication of funding had occurred among USDA agencies. At the 6 agencies we visited, we examined records related to 137 renewable energy projects, totaling \$115.4 million, funded by the Department's various programs. We performed site visits at 89 commercial projects that received approximately \$89 million in funding from USDA. Overall, we found that funds reported as being used for renewable energy projects were actually spent for those purposes. Further, we found no instances where funds specifically appropriated for renewable energy activities were diverted to other purposes and no instances where funds were used for duplicative purposes within USDA.

We did conclude, however, that duplicate funding and efforts could occur within the Department's programs. There are at least six agencies within the Department with programs that fund similar renewable energy projects.<sup>11</sup> The Department has not issued guidance concerning coordination of similar renewable energy projects or verification that applicants are not provided duplicate funds for projects. Also, there are no formal internal controls or a Departmentwide system to compare the details of funded projects to the proposed objectives of new applications.

The following sections detail our concern regarding duplication of funding and research efforts.

#### No Departmental Guidance on Similar Programs

The Department needs to develop written guidance for agency officials to use when processing applications for renewable energy projects. The guidance should provide policy regarding the funding of similar projects. Such guidance is critical considering the number of agencies and programs that fund similar projects.

We identified four agencies (RBS, RUS, FS, and NRCS) that fund similar commercialization projects. Within those agencies, there are 11 programs that fund similar types of renewable energy projects. We identified several cases where overlapping funding was possible. For example, RUS' EL and HECG Programs and RBS' Value-Added Producer Grant and Section 9006 Programs each funded wind and solar projects. The

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<sup>11</sup> RBS, RUS, NRCS, FS, ARS, and CSREES.



total cost for some projects was more than \$2 million, which is significant when there is a risk of overlapping funding. Although we did not find any applicants who received duplicate funding, there are no controls in place to ensure it will not occur.

Other examples included RBS' Section 9006 Program, RUS' EL Program, and NRCS' EQIP and Conservation Innovation Grant Program, which all fund anaerobic digesters for individual farmers. The FS WBUG Program funded biomass projects such as solid and biofuel production, which are also funded by all six RBS and both RUS Programs. In fact, we found instances where the FS WBUG Program and RBS' Section 9006 and RBEG Programs provided funding to the same recipients. The recipients obtained funding without any coordination from USDA agencies for different aspects of the project. (Our audit found no evidence of duplication or improper payments.)

In the research area, ARS, CSREES, and FS each perform or fund similar renewable energy projects. For instance, ARS performed research on converting vegetable oil into biofuel around the same time that CSREES provided grant funds to a university to perform similar research. In addition, while FS generally performs research in the woody biomass area, CSREES also funds research in that area. While performing similar research is not necessarily harmful, agency officials should be aware of similar research and coordinate with each other to obtain maximum benefit from the research.

Agency officials we met with acknowledged the potential for duplication of funding and effort. Those officials stated that they did not receive guidance from the Department or the Energy Council regarding this issue.

#### Formal Controls or Departmentwide Comparison System Needed

None of the four agencies that funded commercial renewable energy projects have formal internal control procedures to check for duplication of funding with other USDA programs. There are no systems to compare data from funded and proposed projects.

One agency, RBS, which has six programs that fund renewable energy projects, requires field staff to enter applicant data into the Guaranteed Loan System (GLS). However, the agency did not establish written procedures requiring field officials to compare applicant information with data already in GLS. We found that officials at one State office we visited were comparing applicant data to prevent duplication. Officials at a second State said they were also comparing data, but we found no evidence of the action.

A Rural Development official stated that RBS and RUS applications require applicants to certify all financing sources, which would identify potential duplication of funding. This control measure may not be effective because applicants often place their own interests and not the interest of the Government first. Additionally, mistakes could occur.

In the research area, ARS officials use the Current Research Information System (CRIS) to verify that proposed research was not duplicating either ongoing or past projects. CRIS includes data relating to objectives, approach, progress, and publication information. For research projects, agency officials perform keyword searches of the data before approving research projects. This control provides some assurance that research will not be duplicated by agency scientists; however, it is not ideal because the use of a wrong keyword would not provide a match. Also, data in the system are voluminous and scientific in nature. As a result, keyword searches may not always focus on the right data.

Although CSREES officials stated that they have several mechanisms for avoiding duplication of renewable energy research, such as the researcher's completion of the "Current and Pending Support" form and a number of different peer review meetings, we found that their use of CRIS to avoid duplication could be improved. CSREES officials also stated that they compared proposed research with CRIS data to identify duplication of efforts. They said that procedures are informal and there is no written guidance for agency officials to follow. However, we found no evidence that agency officials performed such actions prior to approving research grants.

FS relies solely on its scientists to verify that proposed research is not duplicative. The agency has no formalized procedures to verify that research does not duplicate efforts being performed at other agencies.

#### Insufficient Communication within USDA and Outside

According to some agency officials we questioned, they are not required to and have not communicated with each other about specific projects being funded by their respective programs. An RBS official stated that in the past, Rural Development and NRCS field staff held informal meetings to compare applicant information to prevent duplicate funding, but was unsure if the meetings still occurred.

Several agency officials stated that coordination of activities is necessary to prevent duplicative funding. The Energy Council developed a departmental matrix to identify all programs funding renewable energy projects. However, it has not developed a mechanism for agency officials to use the matrix to check for possible duplication upon receiving an application for funding.

In addition, USDA agencies risk funding projects that receive funding from other Federal agencies. RBS was the only agency that we were aware of that shared data with officials from another Federal agency.

## **Recommendation 2**

Develop and implement Departmentwide policy and procedures that require agencies to check for duplicate funding of renewable energy projects within USDA programs.

### **Agency Response**

By September 30, 2008, USDA will establish an inter-agency working group to identify the most efficient approach to cross-checking applications within the Department.

### **OIG Position**

We accept management decision for this recommendation. Final action can be achieved once a copy of the written departmental procedures requiring agencies to cross-check loans, grants, or guarantees within the Department is provided to OCFO.

## **Recommendation 3**

Develop a database of renewable energy projects funded by USDA programs.

### **Agency Response**

The Department agrees to continue to work towards a consolidated database of all USDA renewable energy projects. In the interim, by January 1, 2009, USDA will expand the Energy Matrix to include links to agency databases of renewable energy projects.

### **OIG Position**

We accept management decision for this recommendation. Final action can be achieved once a copy of the updated Energy Matrix that includes links to agency databases of renewable energy projects is provided to OCFO.

## **Recommendation 4**

Develop and implement procedures to check for duplication with other Federal agencies that have similar programs before funding renewable energy projects.

## **Agency Response**

Beginning January 1, 2009, USDA will require agencies to cross-check loans, grants, or guarantees against the Federal Assistance Awards Data System (FAADS) or other agreed-upon alternative systems identified by the inter-agency working group.

## **OIG Position**

We accept management decision for this recommendation. Final action can be achieved once a copy of the written departmental procedures requiring agencies to cross-check loans, grants, or guarantees against the existing FAADS or other agreed-upon alternative systems identified by the inter-agency working group is provided to OCFO.

### Section 3: Inaccurate Reporting

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#### Finding 3

#### USDA Underreported Renewable Energy Funding to the Office of Management and Budget

We found that agencies underreported renewable energy funding by up to \$97 million for FY 2006. Specifically, some agency officials did not (1) use the criteria contained in OBPA's guidance to identify renewable energy funding, (2) distribute OBPA's guidance to officials delegated the responsibility to identify renewable energy funding, or (3) perform sufficient reviews to identify renewable energy funding. We attributed these errors to agency officials not fully understanding reporting requirements, not placing sufficient emphasis on obtaining full and complete information, and not having controls in place to ensure the information was accurate. As a result, the Department reported inaccurate figures to OMB for its use in developing policy.

Periodically, OMB requests information on the extent of program funds spent on renewable energy activities. The Department, through OBPA, collects information three times a year on renewable energy related programs and activities administered by agencies under each mission area. To assist agency budget officials in providing full and complete information on renewable energy activities, OBPA, together with input from OMB and the Energy Council, developed guidance related to renewable energy funding for dissemination to all agencies for compiling the Department's spending on renewable energy activities.

OBPA requested agency officials report on the funding available to support biobased products/bioenergy and energy programs. This included biofuels and the development of biobased products from agricultural and forestry commodities divided into the following categories: commercialization; research and development; outreach and education; and energy efficiency and conservation.<sup>12</sup>

The Department reported over \$1.6 billion in renewable energy activities to OMB since FY 2001. The following are the amounts reported:

<u>Fiscal Year</u>	<u>Reported Renewable Energy Activity (millions)</u>
2001	\$154.3
2002	\$224.6
2003	\$283.5
2004	\$293.1
2005	\$242.1
2006	\$214.2
2007	\$197.1

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<sup>12</sup> USDA Budget Manual, Part II, Chapter 12, Exhibit C-1.

We selected FY 2006 to review and the seven agencies in our review reported over \$207 million, or 97 percent, of the Department's total for that year.<sup>13</sup>

In most agencies, we worked directly with program officials responsible for identifying the extent of expenditures in renewable energy activities that were reported to OBPA. In some instances, they referred us to agency budget officials for additional information or support for the renewable energy expenditures. We also conducted additional test reviews if we determined that agency officials had not made sufficient reviews of the reported figures.

We found that all seven agencies in our review underreported renewable energy activities. Those agencies reported \$207 million in renewable energy activity, but should have reported up to \$304 million. This was over \$97 million more than what was reported to OMB.

We found a variety of reasons for the erroneous reporting. The following examples illustrate those reasons.

- At RBS, program officials submitted renewable energy estimates rather than actual amounts. When this discrepancy was discovered, they were told by OBPA officials that it was too late to revise the amount reported. Also, program officials did not include three small programs – RBEG, Rural Economic Development Grant Program, and Rural Business Opportunity Grant Programs – in their reporting. Expenditures for these three programs totaled over \$1.1 million in FY 2006. The combined errors resulted in an understatement of RBS funding by over \$38 million.
- At RUS, program officials submitted \$7.2 million in expenditures for the HECG Program to Rural Development's budget office, but that amount was not reported to OBPA.
- For FSA, departmental officials omitted the Bioenergy Program because it ended in the middle of FY 2006. They believed that inclusion of this program would distort the Department's renewable energy funding levels for future years. In FY 2006, this program provided \$26 million in incentive payments to biofuel producers.
- CSREES budget officials did not pass along the OBPA guidance to program officials. As a result, program officials established their own criteria using the 2002 Farm Bill as a guide. Budget officials did not know they should provide this guidance to the program officials and had no controls to check actual data provided. Using OBPA's guidance, we identified 32 additional projects totaling approximately

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<sup>13</sup> Two of the seven agencies in our review, FSA and RUS, did not report funding for FY 2006.

\$8 million that met the renewable energy criteria for either the entire research project or for a component of the project. This amount would be in addition to the \$15.9 million reported by CSREES.

- For ARS, agency officials only reported projects with the “biofuels” and “biobased products” budget codes and did not identify an additional 25 projects, with funding totaling \$7 million that met OBPA’s guidelines.
- At NRCS, officials did not include \$9.6 million in renewable energy funding through agency programs because of the difficulty in gathering those figures from the agency’s data system.
- FS’ data systems were unable to track the disposition of woody biomass from agency forests. Further, the data system did not include over \$1.5 million of WBUG Program grant funds used for renewable energy projects.

As described above, we identified significant errors in reporting on renewable energy activities and the reasons for the incorrect reporting. Some agency budget officials delegated the responsibility for identifying these activities to program officials without reviewing or questioning how they arrived at the amounts provided.

Agency officials also explained their difficulty in using the OBPA prescribed reporting format. For instance, OBPA did not include all agency programs on the report template. As a result, some agency officials did not report renewable energy activities for these programs. In response to our audit, some agency officials stated that they have taken corrective actions.

We discussed the various reasons for the incorrect reporting with an OBPA official. The official said that OBPA disseminated guidance to assist agencies in the reporting process and that the OBPA Director held a meeting with all agency budget officials to explain the process, including the reporting format. The official added that OBPA must rely on agency officials to determine what meets the renewable energy criteria and what should be included in the funding report. In our view, OBPA should conduct another meeting, or training session, to review the issues identified during our audit and the overall reporting guidance.

## **Recommendation 5**

Prepare a memorandum to the appropriate agency officials emphasizing the need to accurately identify and submit to OBPA renewable energy activities.

### **Agency Response**

By September 30, 2008, the USDA Energy Council will work with OBPA to provide agencies additional clarification and guidance on the need to accurately identify and submit information on renewable energy activities consistent with current instructions on the crosscut.

### **OIG Position**

We accept management decision for this recommendation. Final action can be achieved once a copy of the additional clarification and guidance is provided to OCFO.

## **Recommendation 6**

Conduct a training session where appropriate departmental and agency budget officials review the issues identified by our audit.

### **Agency Response**

The USDA Energy Council will identify appropriate agency staff by September 30, 2008, that are involved in tracking and reporting of energy activities. Under the guidance of the USDA Energy Council, these staff will review OIG's audit findings and recommendations by November 30, 2008. Guidance will be provided to agencies on steps that they should be taking to be responsive to OIG's findings and recommendations.

### **OIG Position**

We accept management decision for this recommendation. Final action can be achieved by advising OCFO that designated staff reviewed the audit findings and recommendations and guidance was provided to agencies on steps they should be taking to be responsive to the findings and recommendations.

## **Recommendation 7**

Revise the OBPA report format to include all programs that provide funding for renewable energy activities.

### **Agency Response**

By May 30, 2009, a revised reporting format will be completed.



## **OIG Position**

We accept management decision for this recommendation. Final action can be achieved by providing OCFO with a copy of the revised reporting format, which includes all programs that provide funding for renewable energy activities.

## Section 4: Outreach Efforts

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### Finding 4

#### **USDA's Web-Based Renewable Energy Outreach System Needs Modification**

The USDA Energy Matrix did not include important program information. Further, some information in the matrix is confusing because it presents internal USDA activities alongside funding opportunities being provided to potential program applicants. An Energy Council official stated that the matrix is a new system with some glitches. These errors decrease the effectiveness of the matrix as an outreach tool.

The Energy Council Commercialization Committee spearheaded the development of the USDA Energy Matrix to provide information to the public on USDA's energy-related research and development and commercialization programs. The matrix is intended to be a single reference point for anyone in the private sector or academia who would like to partner with USDA. It promotes and highlights all available USDA renewable energy activities, with the ultimate goal of adding other Federal agencies' renewable energy information to the matrix to create a Governmentwide renewable energy reference tool.

The Secretary of Agriculture announced the launching of the Energy Matrix in March 2007, while discussing 2007 Farm Bill proposals for renewable energy. Each mission area provided the information included in the matrix, with Rural Development working with the Office of the Chief Financial Officer and the Office of the Chief Information Officer to populate the information compiled in the matrix. Rural Development provided for the technical development and maintenance of the matrix. According to an Energy Council official, the mission areas are responsible for ensuring the information is accurate and current. The Commercialization Committee reminds the agencies within the mission areas to keep the information current, but does not ensure the accuracy of the information compiled in the matrix.

The Energy Matrix is located on the USDA energy website, which is the primary outreach tool for the Department. The Energy Matrix has been announced and demonstrated to various stakeholder groups such as the Biomass Research and Development Board and its Technical Advisory Committee, the Department of Transportation, OMB, and the Environmental Protection Agency.

Information contained in the USDA Energy Matrix can be viewed three different ways, "By Program," "By Energy," and "By Agency." Our analysis identified 29 instances where programs were not shown on some views of the matrix, diminishing its usefulness. We also found that some programs were

missing from all three views of the matrix. Information was not always clearly presented in the matrix because it includes internal activities provided only for informational purposes alongside programs that provide funding.

The Commercialization Committee is awaiting the implementation of new software, which would aid in the migration of other Federal agencies' information into the matrix. The committee intends to include DOE information first because of the large volume of renewable energy activities in DOE.

In addition, the Energy Matrix is unable to track the number of visitors, ascertain if the information in the matrix is being used. Thus, the Department is unable to determine if the matrix is being used. One official stated that the Department is developing new software to perform this function.

We discussed the lack of accurate and complete views of the matrix with an Energy Council official and provided him with our analysis. He replied that the matrix is still a new system with some glitches. We also discussed our concerns about the inaccuracies of the matrix with Rural Development officials who agreed that this is an issue that needs to be corrected.

## **Recommendation 8**

Update data in the USDA Energy Matrix.

### **Agency Response**

By May 30, 2009, the USDA Energy Council will direct agencies to update the USDA Energy Matrix consistent with actions taken in response to OIG's other recommendations.

### **OIG Position**

We accept management decision for this recommendation. Final action can be achieved by providing OCFO with a copy of the updated matrix.

## **Recommendation 9**

Develop procedures to ensure the accuracy of information submitted for inclusion in the USDA matrix.

### **Agency Response**

The Energy Council will direct various USDA agencies included in the Matrix to incorporate OIG's recommendations for inclusion of quality control measures. The USDA Energy Council will identify, by November 30, 2008,

action items to be accomplished, with updates being developed and implemented by May 30, 2009.

**OIG Position**

We accept management decision for this recommendation. Final action can be achieved by providing OCFO with a copy of the quality control measures developed.

# Scope and Methodology

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We conducted our audit of renewable energy activities at the national offices of seven U.S. Department of Agriculture (USDA) agencies located in Washington, D.C., and Beltsville, Maryland. The seven agencies were: Farm Service Agency (FSA);<sup>14</sup> Rural Business-Cooperative Service (RBS);<sup>15</sup> Rural Utilities Service (RUS);<sup>16</sup> Forest Service (FS);<sup>17</sup> Natural Resource Conservation Service (NRCS);<sup>18</sup> Agricultural Research Service (ARS);<sup>19</sup> and Cooperative State Research, Education, and Extension Service (CSREES).<sup>20</sup> We issued separate audit reports to each agency as warranted.

We selected the seven agencies based on the number of programs and amounts at agencies that funded renewable energy activities. To complete our audit, we performed site visits at 89 commercial renewable energy projects funded by USDA and 4 university research facilities that received funding from CSREES. We visited USDA offices and facilities in 14 States as follows: 3 State offices (Rural Development), 7 area offices (2 for ARS and 5 for Rural Development), 4 research facilities (2 for ARS and 2 for FS), 4 national forests, 2 FS regional offices, and the Kansas City Commodity Office. The 14 States were Arizona, California, Iowa, Illinois, Wisconsin, Maryland, Michigan, Minnesota, Missouri, New Mexico, North Carolina, Pennsylvania, South Dakota, and Virginia.

The period of our audit was fiscal years (FY) 2001 through 2007. The Department provided over \$1.6 billion for renewable energy projects from FYs 2001 through 2007, 99 percent of which was expended in the seven agencies in our audit. Those funds were used for 132 ethanol and biodiesel facilities, 130 wind projects, 22 solar projects, 92 anaerobic digesters, and 7 landfill recovery systems, as well as other projects.<sup>21</sup>

The Department provided more than \$112 million for renewable energy research projects in FY 2006 and almost \$545 million in incentive payments between FYs 2001 and 2006 to biodiesel and ethanol producers. Our audit included an examination of records related to 137 projects at 6 agencies involving over \$115 million.<sup>22</sup>

We selected FY 2006, the most recent actual figures at the time of our fieldwork, for our review of renewable energy activities reported to the

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<sup>14</sup> 03601-0025-KC, Commodity Credit Corporation Bioenergy Program.

<sup>15</sup> 34601-0005-CH, Implementation of Renewable Energy Programs in Rural Business-Cooperative Service.

<sup>16</sup> 09601-0007-TE, Implementation of Renewable Energy Programs in Rural Utilities Service.

<sup>17</sup> 08601-0052-SF, Implementation of Renewable Energy Programs in Forest Service.

<sup>18</sup> 10601-0005-KC, Implementation of Renewable Energy Programs in Natural Resources Conservation Service.

<sup>19</sup> 02601-0002-CH, Implementation of Renewable Energy Programs for Agricultural Research Service.

<sup>20</sup> 13601-0001-HY, CSREES – National Research Initiatives Competitive Grants Program (NRICGP).

<sup>21</sup> 2007 Farm Bill Theme Paper, *Energy and Agriculture*: August 2006.

<sup>22</sup> We did not review records for NRCS.

Office of Management and Budget (OMB). In FY 2006, the seven agencies in our review reported over \$207 million, or 97 percent, of the total amount of \$214.2 million in renewable energy activities reported by USDA. For the seven agencies, program officials provided documentation to support the funds reported to the Office of Budget and Program Analysis. In most agencies, we were referred to program officials responsible for identifying the extent of expenditures in renewable energy activities. We also conducted additional test reviews if we believed sufficient reviews were not made by agency officials of the reported figures.

In the Rural Development mission area, RBS provided \$339 million to fund 1,100 renewable energy projects through seven programs during the period FYs 2001 to 2006. The seven RBS programs were the Renewable Energy and Energy Efficiency Improvement (Section 9006) Program, the Business and Industry (B&I) Guaranteed Loan Program, the Value-Added Producer Grant (VAPG) Program, the Rural Business Enterprise Grants (RBEG) Program, the Rural Business Opportunity Grant (RBOG) Program, the Biomass Research and Development Grant Program, and the Rural Economic Development Loan and Grant (REDLG) Program.

We reviewed 93 RBS projects totaling \$54.4 million from two States (Minnesota and Iowa) for five RBS programs.<sup>23</sup> RBS' Section 9006 Program, the largest renewable energy program in the agency and the only commercialization program with funds appropriated specifically for that purpose, provided \$122 million to fund 832 projects. We reviewed records related to 62 Section 9006 Program projects totaling over \$9.5 million. For RBS, we judgmentally selected two States (Minnesota and Iowa) that had higher numbers of loans and grants and large dollar amounts disbursed through a variety of agency programs.

RUS provided \$113.5 million to fund 23 renewable energy projects through two programs (the High Energy Cost Grant Program and the Electric Loan Program). We reviewed four of those projects totaling almost \$12 million from one State (Arizona). We selected that State because it was the only one with both loans and grants for renewable energy projects.

FSA provided \$544.5 million in incentive payments to 155 ethanol and biodiesel producers from FYs 2001 to 2006 through its Bioenergy Program. Our audit examined records for 5 producers involving more than \$29.6 million.

Per the OBPA renewable energy report, NRCS accounted for 0.2 percent of all renewable energy funding in the Department in FY 2006. Due to the small

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<sup>23</sup> We reviewed projects in the following programs: B&I; REDLG; VAPG; RBEG; and Section 9006. There were no RBOG projects in the two States we visited.

number of renewable energy projects funded by NRCS, we did not conduct site visits or review any related records.

FS funded 64 projects totaling \$14.7 million through the Woody Biomass Utilization Grant Program during FYs 2005 through 2007, 17 of which were directly related to renewable energy projects totaling over \$4.1 million.

In the research area, ARS performed 29 projects involving biofuel and another 53 projects involving biobased products during FY 2006. The 29 biofuel projects received funding of \$20.7 million. The biobased products projects received funding of \$49.9 million. Our audit included seven projects that received nearly \$10.5 million in funding. CSREES provided \$10.9 million during the period FYs 2005 through 2006 to fund 32 renewable energy projects. We reviewed 13 of those projects at 4 universities that received grants totaling over \$4.7 million. The FS expended \$12.3 million in FY 2006 on renewable energy research. We reviewed 15 projects at 2 research facilities that received over \$4.3 million in funding.

To accomplish our objectives, we performed the following procedures related to renewable energy activities within the Department:

- Reviewed applicable laws, regulations, and various agency guidance;
- Reviewed agency policies, procedures, and key internal controls;
- Interviewed agency officials to determine the guidance and direction given to loan and grant applicants;
- Interviewed loan and grant recipients to confirm information provided to agency officials;
- Visited properties financed by agency programs to confirm that funds were used for eligible purposes;
- Interviewed members of the Energy Council and other relevant Department level officials; and
- Reviewed the President's Advanced Energy Initiative.

We conducted our audit from December 2006 through January 2008. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit

objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.



# Exhibit A — Agencies and Programs with Renewable Energy Activity

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Exhibit A – Page 1 of 2

## Rural Business-Cooperative Service

### *Commercialization*

- Section 9006 Renewable Energy and Energy Efficiency Improvement Program<sup>1,2</sup>
- Business and Industry Guaranteed Loan Program<sup>1</sup>
- Value-Added Producer Grant Program<sup>1</sup>
- Rural Business Opportunity Grant Program<sup>1</sup>
- Rural Business Enterprise Grant Program<sup>1</sup>
- Rural Economic Development Loan and Grant Program<sup>1</sup>

### *Research & Development*

- Section 9008 Biomass Research and Development Grant Program<sup>2</sup>

## Rural Utilities Service

### *Commercialization*

- High Energy Cost Grant Program<sup>1</sup>
- Electric Loan Program<sup>1</sup>

## Farm Service Agency

### *Commercialization*

- Bioenergy Program<sup>1</sup>(Section 9010)<sup>2</sup>

## Natural Resources and Conservation Service

### *Commercialization*

- Environmental Quality Incentive Program
- Conservation Innovation Grant Program
- Conservation Security Program
- Conservation Technical Assistance Program
- Resource Conservation and Development Program

### *Research & Development*

- Plant Materials Center

## Forest Service

### *Commercialization*

- Woody Biomass Utilization Grant Program<sup>1</sup>

### *Research & Development*

- Forest Products Laboratories<sup>1</sup>
- Research Stations<sup>1</sup>

---

<sup>1</sup> Program included in our review.

<sup>2</sup> Program legislated by the 2002 Farm Bill.

# ***Exhibit A – Agencies and Programs with Renewable Energy Activity***

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Exhibit A – Page 2 of 2

## Agricultural Research Service

### *Research & Development*

- National Program 307 – Bioenergy and Energy Alternative<sup>1</sup>

## Cooperative State Research, Education, and Extension Service

### *Research & Development*

- Agriculture Materials Program
- National Research Initiative<sup>1</sup>
- Sustainable Agriculture Research and Education
- Small Business Innovations Research

## Office of the Chief Economist

### *Education and Outreach*

- Section 9002 – Federal Procurement of Biobased Products Program<sup>2</sup>
- Section 9004 – Biodiesel Fuel Education Program<sup>2</sup>

## Departmental Administration

### *Education and Outreach*

- USDA BioPreferred Biobased Product Procurement Program
- Alternative Fuel Vehicles/Alternative Fuels

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<sup>1</sup> Program included in our review.

<sup>2</sup> Program legislated by the 2002 Farm Bill.

# Exhibit B – Agency Response

Exhibit B – Page 1 of 27




United States Department of Agriculture  
Rural Development

AUG 13 2008

SUBJECT: Office of Inspector General  
Implementation of Renewable Energy Programs in USDA  
(Audit No. 50601-013-CH)

TO: Robert Young  
Assistant Inspector General for Audit  
Office of Inspector General

FROM: Clyde Thompson   
Deputy Administrator  
Operations and Management

Attached for your review is a response dated August 12, 2008, from the Under Secretary for Rural Development, to the official draft for the above subject audit.

This response is being submitted for inclusion in the final report and your consideration to reach management decision on the recommendations.

If you have any questions, please contact Arlene Pitter of my staff at 202-692-0083.

Attachment

1400 Independence Ave, SW • Washington, DC 20250-0700  
Web: <http://www.rurdev.usda.gov>

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Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD).

# Exhibit B – Agency Response



United States Department of Agriculture  
Rural Development  
Office of the Under Secretary

**TO:** Robert W. Young  
Assistant Inspector General for Audit

**FROM:** *JM* THOMAS C. DORR *Thomas C. Dorr*  
Under Secretary

**RE:** Audit Report No. 50-601-0013-Ch  
"Implementation of Renewable Energy Programs in USDA"

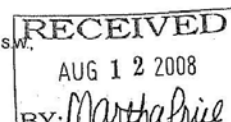
**DATE:** August 12, 2008

Renewable energy presents an historic opportunity for the Nation and a Department-wide priority for USDA. Nine USDA agencies and offices support more than two dozen programs in this area ranging from research and development to commercialization to outreach and education. USDA's renewable energy initiatives yield significant benefit to agriculture, rural America, and the Nation. For reasons of national, environmental, economic and energy security, as well as, the potential for economic development, especially in rural America, we anticipate that USDA's activities in this area will continue to increase in the years ahead.

The sheer number of USDA renewable energy programs managed by multiple mission areas, agencies, and offices creates issues of strategic direction, potential duplication, and reporting. In December 2005, the Secretary of Agriculture established an Energy Council within USDA to assist with policy development and coordination. In the two and a half years since that time, USDA has made substantial strides in managing these activities. We have also initiated programs to accelerate outreach, leverage private investment, and support the rapid commercialization of new technologies. In several program areas this has already resulted in a realignment of staff and priorities.

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Washington, DC 20250-9410 or call (800)795-3272 (voice) or (202) 720-6382 (TDD).



We acknowledge, however, that the variety and complexity of these initiatives and the rapidity of change in the renewable energy sector make coordination an ongoing challenge. We therefore appreciate OIG's constructive review and suggestions. Several USDA agencies have already responded separately (attached) to agency-specific findings. Agencies have accepted the substantial majority of OIG's findings and recommendations and are already working to incorporate suggested changes. In some instances, the affected agency believes that the OIG report fails to adequately reflect corrective actions and new initiatives already underway. Finally, in a limited number of instances, the affected agency disagrees with one or more of OIG's findings and we look forward to continued discussion on these issues.

In the aggregate, however, we find that OIG's recommendations are broadly consistent with USDA's current renewable energy policy objectives and initiatives. Many of USDA's renewable energy activities are relatively new, and we acknowledge that various USDA agencies are at different points on the renewable energy "learning curve." We recognize the importance of developing a well-defined USDA-wide strategy that provides detailed benchmarks for all agencies. We agree that USDA can and should collect more extensive long-term data on project results; this would assist us in identifying best practices and appropriately targeting limited resources. USDA Rural Development has already begun to develop reporting systems in this area and is prepared to share these initiatives with other Mission Areas.

With regard to other matters, of the sample of funds tested, OIG found that funds reported as being used for renewable energy projects were actually spent for those purposes. We also note that OIG found no instances of duplication of effort on a project basis among USDA's various renewable energy programs, although OIG believes that it would be prudent to further strengthen our internal reviews in this area. We concur with the finding by OIG that USDA underreports by a substantial margin its activities in this area. This is a scorekeeping issue, but a significant one; activities that are inappropriately tracked and scored for purposes of budget analysis may be at risk, going forward, of "falling through the cracks" in the development of a more detailed and comprehensive USDA renewable energy strategy.

Finally, we anticipate an ongoing managerial evolution in this area. The renewable energy field is dynamic. The build out in several sectors is rapid. New technologies are emerging. Private investment is growing and, as it does, the role of public investment will change. Opportunities cut across agency boundaries and will involve extensive collaboration among USDA agencies and with other Departments. The one certainty is change.

Pursuant to Audit Report No. 50-601-0013-Ch, OIG has identified nine specific Department-wide recommendations. We concur with the recommendations and propose the following response measures:

## **Recommendation 1**

**Develop and implement a strategy for renewable energy activities for all agencies and programs within the Department that includes goals, a plan for agencies to follow in achieving those goals, a means of obtaining and measuring program results, and a comparison of project results to established goals.**

We believe that our response to Recommendation 1 should build on existing planning elements and should not create a new, separate, planning and reporting mechanism.

USDA's long term strategy is developed through a five year strategic planning cycle that is conformed to the Government Results and Performance Act and President's Management Agenda. We are currently developing the 2010 Budget and planning for the final year of the 2005-2010 Strategic Plan.

In response to Recommendation 1 we therefore propose to elevate renewable energy planning within the context of the current strategic planning process:

An inter-agency working group reporting to the USDA Energy Council will develop recommendations for identifying renewable energy programs and incorporating specific renewable energy planning and reporting targets (including performance measures), and priorities identified by the Biomass Research and Development Board, for inclusion in the 2011-2015 USDA Strategic Plan.

- a. This group will be identified by September 30, 2008.
- b. The working group will submit recommendations to the Energy Council by May 1, 2009 so that they can be fully considered in departmental preparations for the 2011-2015 Strategic Plan.

## **Recommendation 2**

**Develop and implement Department-wide policy and procedures that require agencies to check for duplicate funding of renewable energy projects within USDA programs.**

Where consistent with existing regulation and approved information collection procedures, the USDA Energy Council will direct agencies to crosscheck loan and grant applicants with awards of Federal assistance reported in the Federal Assistance Awards Data System (FAADS) established by the Census Bureau. This will be accomplished by January 1, 2009. In addition, as outlined in Recommendation 1, USDA will by September 30, 2008, establish an inter-agency Working Group that in addition to addressing issues identified in Recommendation 1, will be responsible for identifying and recommending to the Energy Council the most efficient approach to cross-checking applications within the Department.

### **Recommendation 3**

#### **Develop a database of renewable energy projects funded by USDA programs.**

As an interim corrective action, the USDA Energy Council will review agency procedures for storing project level information for renewable energy activities to the extent that the data bases exist and will expand the Energy Matrix to include links to agency databases of renewable energy projects. This will be accomplished by January 1, 2009.

We agree to pursue the development and implementation of a consolidated database of USDA renewable energy activities that will record, track, assess, and compare renewable energy project funding, types of research and results, amongst other things, until it is completely and successfully implemented. This effort shall be made in conjunction with the continued emphasis of renewable energy as a top priority at USDA.

### **Recommendation 4**

#### **Develop and implement procedures to check for duplication with other federal agencies that have similar programs before funding renewable energy projects.**

Title 31 Section 6102(a) of the United States Code requires the establishment of a uniform system for reporting information on Federal government financial assistance transactions, formally known as the Federal Assistance Award Data System (FAADS). In 1982, the Office of Management and Budget designated the Census Bureau as the Executive Agent for the Federal Assistance Award Data System. (Source: <http://www.census.gov/govs/www/faads.html>)

The information in the FAADS is used to provide the Congress, the Executive Branch, other public agencies, and private groups with data on the geographic distribution of Federal funds. Policy oversight for FAADS is provided by OMB. All final decisions concerning FAADS, its operation, comprehensiveness, and coverage rest with OMB. (Source: <http://www.census.gov/govs/www/faads.html>)

Beginning January 1, 2009, USDA will require agencies to cross-check energy loans, grants, or guarantees against the existing FAADS system, or other agreed-upon alternative systems identified by the inter-Agency Working Group.

## **Recommendation 5**

**Prepare a memorandum to the appropriate agency officials emphasizing the need to accurately identify and submit to OBPA renewable energy activities.**

Upon completion of the strategic plan for FY 2011-2016, USDA Energy Council will review its instructions for reporting data for the energy crosscut and work with agency staff to ensure complete and accurate reporting.

Prior to that action, the USDA Energy Council will work with Office of Budget and Policy Analysis (OBPA) to provide agencies additional clarification and guidance on the need to accurately identify and submit information on renewable energy activities consistent with current instructions on the energy crosscut, by September 30, 2008.

## **Recommendation 6**

**Conduct a training program where appropriate Departmental and agency budget officials review the issues identified by our audit.**

The USDA Energy Council will identify appropriate agency staff by September 30, 2008, that are involved in tracking and reporting of energy activities, as currently identified in the USDA energy crosscut. Under the guidance of the USDA Energy Council, these staff will review OIG's audit findings and recommendations by November 30, 2008. Guidance will be provided to agencies on steps that they should be taking to be responsive to OIG's findings and recommendations.

## **Recommendation 7**

**Revise the OBPA report format to include all programs that provide funding for renewable energy activities.**

As part of the strategic planning process, the USDA Energy Council will further identify renewable energy activities and programs of USDA. With this information the USDA Energy Council will provide additional guidance on how to revise the reporting format utilized by OBPA to collect funding information for renewable energy activities. A revised reporting format will be completed by May 30, 2009.

OBPA will then issue revised instructions for reporting data and collect the data as part of the development of the 2011 budget.

## **Recommendation 8**

**Update data in the USDA Energy Matrix.**

The USDA Energy Council will direct agencies to update the USDA Energy Matrix consistent with actions taken in response to OIG's other recommendations by May 30, 2009.



## **Recommendation 9**

**Develop procedures to ensure the accuracy of information submitted for inclusion in the USDA Matrix.**

The USDA Energy Council will direct various USDA agencies included in the Matrix to incorporate OIG's recommendations for inclusion of quality control measures. The USDA Energy Council will identify by November 30, 2008 action items to be accomplished, with updates being developed and implemented by May 30, 2009.

## **Closing**

In closing, USDA is committed to the rapid deployment of a wide range of renewable energy technologies. Because of its feedstock and siting requirements, renewable energy is largely rural energy. It represents perhaps the greatest new opportunity for economic growth and wealth creation in rural America in our lifetimes. Biofuels-driven demand is a major factor underlying today's record farm income and rising farm equity, and next-generation feedstocks hold enormous potential for reducing the Nation's dependence on imported oil. The United States has led the world since 2005 in new installed wind capacity, virtually all of it in rural areas. Utility-scale solar development will also occur primarily in rural areas. We are alert to other renewable energy technologies as well.

For all these reasons, USDA's commitment to renewable energy will continue to grow in the years ahead. We are actively reaching out to private investors, to rural stakeholders, and to the academic and industrial research communities to develop new partnerships and harness new resources to accelerate the build out of renewables. We recognize that this effort will pose myriad challenges to USDA, and we are grateful to OIG for its assistance in strengthening our planning and oversight capabilities in this critically important area.

## **Enclosures**

Cc: Ed Schafer, Secretary of Agriculture  
Boyd Rutherford, Assistant Secretary for Departmental Administration  
Linda Strachen, Assistant Secretary for Congressional Relations  
Mark Rey, Under Secretary for Natural Resources and Environment  
Gale Buchanan, Under Secretary for Research Education & Economics  
Mark Keenum, Under Secretary for Farm & Foreign Agricultural Services  
Chris Connelly, Director, Office of Communications  
Charles Christopherson, CIO/CFO  
Marc L. Kesselman, General Counsel  
Joseph Glauber, Chief Economist  
Scott Steele, Director, Office of Budget and Program Analysis

# Exhibit B – Agency Response

Exhibit B – Page 8 of 27

Jun. 30. 2008 3:59PM

No. 5404 P. 1



United States  
Department of  
Agriculture

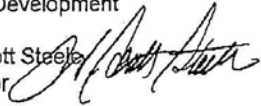
Office  
of the  
Secretary

Office of Budget  
and Program  
Analysis

Washington,  
D.C.  
20250

JUN 30 2008

**TO:** John Purcell  
Director, Financial Management Division  
Rural Development

**FROM:** W. Scott Steeles  
Director 

**SUBJECT:** Comments on Draft Audit of USDA's Renewable Energy Programs  
(Report No. 50601-0013-Ch)

Thank you for the opportunity to comment on the Office of Inspector General (OIG) draft audit of USDA's renewable energy programs. This audit includes the following three recommendations relating to our office: (1) prepare a memorandum to the appropriate agency officials emphasizing the need to identify and submit to OBPA funding information on renewable energy activities; (2) conduct a training session for appropriate Departmental budget officials to review the issues identified in the OIG audit; and (3) revise the OBPA reporting format to include all programs that provide funding for renewable energy activities.

We note that our office has been working closely with the USDA Energy Council to ensure that appropriate agency officials and Departmental budget officers are fully aware of the need to provide complete and accurate information on the funding of renewable energy activities. The USDA Budget Manual, Chapter 12-Part 11, Appendix A, Part 2B, which our office prepares, states that agencies should include in the energy crosscut information on all energy related programs that support the National Energy Policy, the Advanced Energy Initiative, the Energy Policy Act of 2005, and other specific authorities. We generally meet with agency budget officers soon after this guidance is released to discuss the exhibits and respond to questions. We are certainly willing to consider additional actions, including the preparation of a memorandum, conducting a training session, and revising the reporting format on renewable energy activities. However, we would note that it would be more appropriate for the USDA Energy Council to take the lead in providing policy level support for any actions that may be necessary to address the OIG recommendations.

In terms of technical reporting requirements, we would note that only a limited number of USDA programs relate directly to energy related goals and objectives. Funding for these programs is usually readily available and has been reported on the energy crosscut. Many other programs are designed primarily to meet other USDA goals and objectives although they may contribute to renewable energy goals and objectives. Information on a number of these programs is reported in the crosscut. In some cases,

## **Exhibit B – Agency Response**

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Exhibit B – Page 9 of 27

Jun. 30. 2008 3:59PM

No. 5404 P. 2

2

funding data specific to such contributions is not readily available. Further, such data would not necessarily be used in funding decisions that are based on performance relating to programs' primary goals and objectives. We will continue to work with agencies to ensure data, where available, is reported on the crosscut.

cc: Clyde Thompson  
Deputy Administrator for Operations and Management  
Rural Development

# Exhibit B – Agency Response

Exhibit B – Page 10 of 27



Washington, DC  
20250-2200

JUN 25 2008

TO: Thomas C. Dorr  
Under Secretary  
Rural Development

FROM: Colien Hefferan *Colien Hefferan*  
Administrator

SUBJECT: Audit Report No. 50601-0013-Ch – Implementation of Renewable Energy Programs in USDA

This is in response to your May 30, 2008, memorandum requesting our written response to the official draft of the subject audit, detailing corrective actions taken or planned on each audit recommendation.

The Cooperative State Research, Education, and Extension Service (CSREES) concurs with all recommendations in the subject report and the Attachment provides our responses to the nine recommendations. Below is our response to your overall recommendation in the "Executive Summary":

Recommendation in Brief: *We are recommending that:*

- ▲ *The Energy Council and the Office of the Under Secretary for Rural Development develop and implement a USDA renewable energy strategy for all agencies and programs within the Department.*
- ▲ *Department officials establish procedures to (1) ensure that renewable energy funding is accurately identified and reported to Office of Management and Budget (OMB), (2) prevent and detect duplicate funding within USDA and other Government agencies, and (3) revise the Department's Energy Matrix.*

Agency Response: CSREES will comply with the USDA renewable energy strategy and will assist with (1) the accurate identification and reporting of renewable energy funding to OMB, (2) the prevention and detection of duplicate funding within USDA and other Government agencies, and (3) the revision of the Department's Energy Matrix.

CSREES appreciates the audit work conducted by the Office of Inspector General (OIG) auditors as their efforts have and will contribute to improved monitoring and oversight by CSREES of Federal funds awarded through the Renewable Energy programs administered by CSREES.

**Cooperative State Research, Education, and Extension Service (CSREES) Response  
to the May 30, 2008 Draft USDA Office of Inspector General  
Audit Report No. 50601-0013-Ch: Implementation of Renewable Energy Programs in  
USDA**

**Section 1. Renewable Energy Strategy**

**Finding 1. Guidance Defining Goals, Objectives, and Performance Measures Needed to Ensure Greater Emphasis on Renewable Energy Activities**

**Recommendation 1:** *Develop and implement a strategy for renewable energy activities for all agencies and programs within the Department that includes goals, a plan for agencies to follow in achieving those goals, a means of obtaining and measuring program results, and a comparison of project results to established goals.*

**Agency Response:**

CSREES concurs. CSREES will comply with Departmental policies and procedures on the implementation of a strategy for renewable energy activities.

**Section 2. Duplication of Funding**

**Finding 2. Funds Used for Intended Purposes, but Policies and Procedures to Prevent Duplicative Funding are Absent**

**Recommendation 2:** *Develop and implement Departmentwide policy and procedures that require agencies to check for duplicate funding of renewable energy projects within USDA programs.*

**Agency Response:**

CSREES concurs. CSREES will implement any Departmentwide policy and procedures that require agencies to check for duplicate funding of renewable energy projects within USDA programs. In addition, CSREES will develop and implement procedures to check for duplicate renewable energy activities in the Current Research Information System (CRIS). Target completion date per USDA OIG Audit Report No. 13601-1-Hy is September 30, 2008.

**Recommendation 3:** *Develop a database of renewable energy projects funded by USDA programs.*

**Agency Response:**

CSREES concurs. CSREES will input data into a database of renewable energy projects funded by USDA programs after it is developed.

**Recommendation 4:** *Develop and implement procedures to check for duplication with other Federal agencies that have similar programs before funding renewable energy projects.*

**Agency Response:**

CSREES concurs. CSREES will implement the procedures established to check for duplication with other Federal agencies that have similar programs before funding renewable energy projects.

**Section 3. Inaccurate Reporting**

**Finding 3. USDA Underreported Renewable Energy Funding to the Office of Management and Budget**

**Recommendation 5:** *Prepare a memorandum to the appropriate agency officials emphasizing the need to accurately identify and submit to OBPA renewable energy activities.*

**Agency Response:**

CSREES concurs. CSREES will comply with any guidance provided by OBPA on how to accurately identify and submit renewable energy data to OBPA.

**Recommendation 6:** *Conduct a training session where appropriate Departmental and agency budget officials review the issues identified by our audit.*

**Agency Response:**

CSREES concurs. Agency will attend training sessions where the issues identified by this audit will be reviewed.

**Recommendation 7:** *Revise the OBPA report format to include all programs that provide funding for renewable energy activities.*

**Agency Response:**

CSREES concurs. Agency will follow the revised OBPA report format that will include all programs that provide funding for renewable energy activities.

**Section 4. Outreach Efforts**

**Finding 4. USDA's Web-Based Renewable Energy Outreach System Needs Modification**

**Recommendation 8.** *Update data in the USDA Energy Matrix.*

**Agency Response:**

CSREES concurs. CSREES will comply by ensuring data being provided for the USDA Energy Matrix is accurate.

**Recommendation 9.** *Develop procedures to ensure the accuracy of information submitted for inclusion in the USDA matrix.*

**Agency Response:**

CSREES concurs. CSREES will comply with the procedures developed to ensure the accuracy of information submitted for inclusion in the USDA matrix.

## **Exhibit B – Agency Response**

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Exhibit B – Page 14 of 27

However, CSREES disagrees with the last paragraph on Page 18 of the official draft report as CSREES Budget Officials did pass along the Office of Budget and Program Analysis (OBPA) guidance to program officials; and they share and will continue to communicate important budgetary requirements to the appropriate Agency officials, particularly the program staff.

Questions regarding this memorandum can be directed to Ellen Danus, Office of Extramural Programs, on (202) 205-5667.

Attachment



# Exhibit B – Agency Response

Exhibit B – Page 15 of 27

06/25/2008 10:59 5844514

USDA CMU

PAGE 01/02



United States Department of Agriculture  
Research, Education, and Economics  
Agricultural Research Service

June 23, 2008

SUBJECT: Response to Audit Report: *Implementation of Renewable Energy Programs in USDA* (Report Number 50601-0013-Ch)

TO: Robert W. Young  
Assistant Inspector General for Audit  
Office of Inspector General

FROM: Edward B. Knipling *Edward B. Knipling*  
Administrator

Thank you for the opportunity to respond to the Official Draft of subject report (hereinafter *USDA report*).

We previously participated in audit activities specific to Agricultural Research Service (ARS) renewable energy programs, received an official draft (*Implementation of Renewable Energy Programs at the Agricultural Research Service*, report 02601-0002-Ch), and responded to said draft on April 28, 2008 (our response is attached, for your reference). We have also responded to the official draft of the USDA report on May 23 (also attached).

We still feel there are remarks in the USDA report that do not adequately reflect the processes and procedures we have in place in ARS.

- On page 10, section titled Renewable Energy Projects Not Analyzed, we provided a justification for the three projects you mention, which we feel are projects that have impact (see our previous responses). Also previously mentioned by us, it is completely inaccurate to state that "[d]uring each cycle, agency officials do not analyze projects for either continued relevance or if the research involves priorities set by the Administration and Congress." Annually, after the lead investigator on each research project completes an annual report on progress, the reports are analyzed both by line management for performance and quality, and by program management for relevance, i.e. if the research is of current national priority as suggested by the Administration, Congress, or our customers, stakeholders and partners. Each research unit is given a relevance score by its lead National Program Leader. These scores are used in a variety of ways, but mostly to indicate when attention or mid-course correction is warranted.

eds

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1400 Independence Avenue, SW  
Washington, DC 20250-0300  
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# Exhibit B – Agency Response

05/26/2008 10:59 5044514

USDA CMU

PAGE 02/02

Robert W. Young

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- o Further, we have this year incorporated a more explicit solicitation of progress in this year's annual project reports, in direct response to the ARS audit, which we previously documented.
- o On page 18, the report mentions that ARS officials failed to identify 25 projects under OBPA's guidelines to identify renewable energy projects. We have taken steps to address this issue in February 2008, and, as we have indicated previously, would appreciate this noted in the report.
- o On page 10-11, the report implies ARS is not working in the priority area of development of cellulosic ethanol. Budget numbers provided previously clearly show ARS' growing emphasis on research for cellulosic feedstocks and biorefining. In fiscal year (FY) 2009, we plan to spend over 2/3 of the dollars included in our biofuels coding (which includes traditional biofuels such as biodiesel, not just ethanol) on cellulosic ethanol. In FY 2008, over half those dollars are being spent on research to make strides in the area of cellulosic ethanol.
- o On page 11, the report mentions a specific example of a research project on dry-grinding process of converting cornstarch to ethanol. The independent retrospective review panel met and did indeed conclude that no continued investment of public funds for research was justified in this mature area. Your report correctly states, however, that this research continued uninterrupted at the time of the audit. That is technically correct, but we still feel the report should state that the project is in the process of being re-written for peer review, which is the next chronological step of the total National Program cycle.
- o On the same page, in the next paragraph, the report does not represent the use of the retrospective assessment panel results in a clear fashion. As explained in an earlier item, we have a process designed to monitor ongoing research annually. The retrospective panel results are not designed to be redundant to that system. Instead, the retrospective panel is designed to analyze the results of the completed program and measure its success against the national program action plan ratified at the beginning of the five-year cycle. Thus, ARS has a nested performance review process, with processes to measure performance both mid- and post- research program. The USDA report, as currently written, mixes the two processes, portraying neither as adequate to both purposes.
- o On page 14, under the section titled No Departmental Guidance on Similar Programs, the report implies a lack of coordination among research at CSREES and FS. As we have previously indicated, ARS senior program leaders coordinate closely with their counterparts in the other Agencies. For instance, representatives of ARS and CSREES actively participate on the REE Agricultural Bioenergy and Bioproducts Research, Education and Economics Council (ABBREE Council) which formally meets every other week. In addition, CSREES National Program Leaders for bioenergy participate in ARS bioenergy workshops, such as the Customer-Stakeholder Workshop in September 2007.

These comments are based on the body of the report, and we would expect concomitant changes to the executive summary when you consider our suggestions and remarks.

Thank you in advance for consideration of these comments. I look forward to the final report.

# Exhibit B – Agency Response




United States Department of Agriculture  
Research, Education, and Economics  
Agricultural Research Service

May 23, 2008

SUBJECT: Response to Audit Report: *Implementation of Renewable Energy Programs in USDA* (Report Number 50601-0013-Ch)

TO: Robert W. Young  
Assistant Inspector General for Audit  
Office of Inspector General;

FROM: Edward B. Knipping  
Administrator 

Thank you for the opportunity to provide an Agricultural Research Service (ARS) response to the Discussion Draft of subject report (hereinafter *USDA draft report*).

We previously participated in audit activities specific to ARS renewable energy programs, received an official draft (*Implementation of Renewable Energy Programs at the Agricultural Research Service*, report 02601-0002-Ch), and responded to that draft on April 28, 2008 (our response is attached, for your reference).

We do not feel the broader USDA draft report adequately reflects the comments we made for the ARS report. We have also found some specific issues mentioned in the USDA draft report we have not previously had the opportunity to respond to or discuss. As such, we are providing these extensive written comments that we request be considered and incorporated into your final USDA report.

- On page 9, section titled Renewable Energy Projects Not Analyzed, we provided a justification for the three projects mentioned, which we feel are projects that have impact (see our response to the main recommendations, attached, labeled 1). Further, although ARS projects do follow a 5-year cycle, they are monitored annually for progress toward national priorities, and ranked based on relevance. We also incorporated a more explicit solicitation of progress in this year's annual project reports, in direct response to the ARS audit, which we documented in that same response to the main recommendations, labeled 1.
- On page 18, the report mentions that ARS officials failed to identify 25 projects under OBPA's guidelines to identify renewable energy projects. We have taken steps to address this issue in February 2008, and would appreciate this noted in the report.



Office of the Administrator  
Jamie L. Whitten Federal Building • Room 302-A • 1400 Independence Avenue, SW.  
Washington, D.C. 20250-0300  
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# Exhibit B – Agency Response

Robert W. Young

2

In addition, we have remarks and comments on material not previously emphasized that we would like addressed:

- On page 9, the report implies ARS is not working in the priority area of development of cellulosic ethanol. To the contrary, ARS has a substantial and growing research program in this area. Since 2001 and including 2009 budget estimates, ARS will have increased its funding of research for cellulosic-based bioenergy by 700 percent. The data below (figures are in \$ million) clearly show ARS' growing emphasis on research for cellulosic feedstocks and biorefining (conversion technology).

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Biofuels	7	17	19	20	20	20	21	22	25
Cellulosic Ethanol	2	9	10	11	11	11	12	12	16

The statement “instead of performing research that fosters the breakthrough technologies necessary to make cellulosic ethanol cost competitive, ARS is performing research involving mature technology” is not an accurate reflection of our commitment to increasing emphasis on cellulosic ethanol.

- On page 10, the report mentions a specific example of a research project on dry-grinding process of converting cornstarch to ethanol. An independent retrospective review panel met and did indeed conclude that no continued investment of public funds for research was justified in this mature area. Your report incorrectly states, however, that this research continues uninterrupted. The report should state that ARS has already recognized the need for change and the project is in the process of being rewritten for peer review, which is the next chronological and systematic step for project revision with ARS National Program cycle.
- On the same page, in the next paragraph, the report incorrectly represents the use of the retrospective assessment panel results. The results are primarily used to analyze the result of the completed program and measure its success against the National Program action plan ratified at the beginning of the five-year cycle. These results then feed into the next cycle's input phase, i.e. to provide feedback that, in part but not in whole, helps program leaders decide what priorities are to receive focus in the coming years.
- Further, on page 10, we would like to note that we do have practices and procedures in place “to obtain and measure program results” (our retrospective review process) and to compare “project results to established goals” (our established annual report review practice and newly changed progress review process).
- On page 13, under the section titled No Departmental Guidance on Similar Programs, the report implies a lack of coordination among research at CSREES and FS. To the contrary, ARS senior program leaders coordinate closely with their counterparts in the other Agencies. For instance, representatives of ARS and CSREES actively participate on the REE

## Exhibit B – Agency Response

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Agricultural Bioenergy and Bioproducts Research, Education and Economics Council (ABBREE Council) which formally meets every other week. In addition, CSREES National Program Leaders for bioenergy participate in ARS bioenergy workshops, such as the Customer-Stakeholder Workshop in September 2007. This issue is also repeated on page 14 and we have the same comment for that section.

Finally, we have feedback on points that are broader than just ARS.

- Regarding a Departmentwide strategy for renewable energy (page ii), the USDA Biobased Products and Bioenergy Coordination Council, a Departmentwide body (see <http://www.ars.usda.gov/bbcc/>) did write a “Framework for Coordinating Program Planning” document in April, 2007. This BBCC document was submitted to USDA leadership for approval. It is on hold pending the release of the inter-departmental Biomass R&D Board’s National Bioenergy Action Plan.
- On p. 5, the Energy Council is said to be “developing” a Departmentwide research and development strategy. A final draft of this USDA Bioenergy R&D Strategy was submitted by the Research and Development Committee to the Energy Council in January 2007.

These comments are based on the body of the report, and we would expect concomitant changes to the executive summary when you consider our suggestions and remarks.

Thank you in advance for consideration of these comments.

Enclosure

# Exhibit B – Agency Response



April 28, 2008

SUBJECT: Response to Audit Report *Implementation of Renewable Energy Programs at the Agricultural Research Service*

TO: Robert W. Young  
Assistant Inspector General for Audit  
Office of Inspector General  
Attn: 02601-0002-Ch

FROM: Edward B. Knipping  
Administrator

A handwritten signature in dark ink, appearing to read "Edward B. Knipping". The signature is written in a cursive style and is positioned to the right of the typed name "Edward B. Knipping".

On March 25, 2008, I received the subject report. Thank you for the opportunity to respond for the record.

The report summarized the following recommendations on page 4:

"[w]e recommended that ARS officials establish a process to review all research projects on a periodic basis to evaluate their continued relevancy and productivity in terms of meeting Departmental and Administration energy goals. We also recommended that ARS officials develop and implement procedures for reporting renewable energy activities using the appropriate guidelines, and for responding to future information requests in an adequate manner."

ARS has the following responses to the main recommendations of the report:

1) Periodic project review: the National Program Staff (NPS) has responsibility for oversight of the national research programs. Progress toward program goals is monitored annually through annual project reports from all over the Nation, which are compiled into National Program Annual Reports by the National Program Leaders (NPL). This fiscal year, we will revise the ARS form 421 (Annual Report Form) to solicit more explicit report on each project's progress toward national program goals. This progress will be assessed by the NPL.

As to the specific projects mentioned in the report, project 1935-41000-069 Aqueous Enzymatic Extraction of Corn Oil and Value Added Products from Corn Germ Produced in New Generation Dry Grind Ethanol Processes, project 1935-41000-072 Economic Competitiveness of Renewable Fuels Derived from grain and Related Biomass, and project 1935-41000-070 Enzyme-Based Technologies for Milling Grains and Producing Biobased Products and Fuels will not be substantially changed in response to the subject Audit. ARS program managers believe that by performing research that enables either a reduction in processing costs or the production of higher-value co-products by corn-ethanol distillers, ARS helps these distillers remain

Office of the Administrator  
Jamie L. Whitten Federal Building, Room 302-A, 1400 Independence Avenue, SW.  
Washington D.C. 20250-0300

commercially viable if and when raw material prices go up and/or product ethanol prices go down. The economic benefits of this research are evident today. Prices for agricultural commodities, and especially corn grain, are at all-time highs. In addition, prices for fuel ethanol are stagnant or decreasing as the production capacity for ethanol reaches levels that run up against physical distribution limits and market saturation. The ARS research for co-products from first-generation biorefineries, such as ethanol distilleries, will help distilleries maintain their operating margins and stay in business. Research that takes out costs or creates additional value for a value-added chain can only help the long-term viability of all the industries – in this case, from seed to pump – serving that chain. Improving corn starch conversion efficiency reduces the amount of corn needed for fuel, reducing ethanol competition with food and feed.

2) Reporting procedures: the Budget and Program Management Staff (BPMS), the NPS, and the USDA Office of Budget and Program Analysis (OBPA) are currently working to address this issue and to ascertain that all bioenergy programs are being reported in accordance with the "new" definitions and example activities which OBPA provided as a guide in developing the agency crosscut. A comprehensive list of research projects contributing to ARS Bioenergy and Energy Alternatives Research was provided to OBPA in February 2008, and we are in the process of making necessary corrections to the research project coding to address future budget reporting.

Thank you again for the opportunity to respond to the draft report. I look forward to receiving the final version.

# Exhibit B – Agency Response

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Exhibit B – Page 22 of 27

July 7, 2008

SUBJECT: Response to Audit Report: *Implementation of Renewable Energy Programs in USDA*  
(Report Number 50601-0013-Ch)

TO: Robert W. Young  
Assistant Inspector General for Audit  
Office of Inspector General

FROM: Edward B. Knipling /s/  
Administrator

Thank you for the opportunity to respond to the Official Draft of subject report. Please see our response, with items grouped under the report's Findings 1-3, Recommendations \*. We have no response to Finding 4.

**Finding 1 Guidance Defining Goals, Objectives, and Performance Measures  
Needed to Ensure Greater Emphasis on Renewable Energy  
Activities**

*Recommendation 1* - Develop and implement a strategy for renewable energy activities for all agencies and programs within the Department that includes goals, a plan for agencies to follow in achieving those goals, a means of obtaining and measuring program results, and a comparison of project results to established goals.

- o On page 10, section titled Renewable Energy Projects Not Analyzed, we provided a justification for the three projects you mention, which we feel are projects that have impact (see our previous responses). Also previously mentioned by us, it is completely inaccurate to state that “[d]uring each cycle, agency officials do not analyze projects for either continued relevance or if the research involves priorities set by the Administration and Congress.” Annually, after the lead investigator on each research project completes an annual report on progress, the reports are analyzed both by line management for performance and quality, and by program management for relevance, i.e. if the research is of current national priority as suggested by the Administration, Congress, or our customers, stakeholders and partners. Each research unit is given a relevance score by its lead National Program Leader. These scores are used in a variety of ways, but mostly to indicate when attention or mid-course correction is warranted.



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- Further, we have this year incorporated a more explicit solicitation of progress in this year's annual project reports, in direct response to the ARS audit, which we previously documented.
- On page 10-11, the report implies ARS is not working in the priority area of development of cellulosic ethanol. Budget numbers provided previously clearly show ARS' growing emphasis on research for cellulosic feedstocks and biorefining. In fiscal year (FY) 2009, we plan to spend over 2/3 of the dollars included in our biofuels coding (which includes traditional biofuels such as biodiesel, not just ethanol) on cellulosic ethanol. In FY 2008, over half those dollars are being spent on research to make strides in the area of cellulosic ethanol.
- On page 11, the report mentions a specific example of a research project on dry-grinding process of converting cornstarch to ethanol. The independent retrospective review panel met and did indeed conclude that no continued investment of public funds for research was justified in this mature area. Your report correctly states, however, that this research continued uninterrupted at the time of the audit. That is technically correct, but we still feel the report should state that the project is in the process of being re-written for peer review, which is the next chronological step of the total National Program cycle.
- On the same page, in the next paragraph, the report does not represent the use of the retrospective assessment panel results in a clear fashion. As explained in an earlier item, we have a process designed to monitor ongoing research annually. The retrospective panel results are not designed to be redundant to that system. Instead, the retrospective panel is designed to analyze the results of the completed program and measure its success against the national program action plan ratified at the beginning of the five-year cycle. Thus ARS has a nested performance review process, with processes to measure performance both mid- and post- research program. The USDA report, as currently written, mixes the two processes, portraying neither as adequate to both purposes.

**Finding 2 Funds Used for Intended Purposes, but Policies and Procedures to Prevent Duplicative Funding are Absent**

*Recommendation 2* - Develop and implement Departmentwide policy and procedures that require agencies to check for duplicate funding of renewable energy projects within USDA programs.

*Recommendation 3* - Develop a database of renewable energy projects funded by USDA programs.

*Recommendation 4* - Develop and implement procedures to check for duplication with other Federal agencies that have similar programs before funding renewable energy projects.

- On page 14, under the section titled No Departmental Guidance on Similar Programs, the report implies a lack of coordination among research at CSREES and FS. As we have previously indicated, ARS senior program leaders coordinate closely with their

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counterparts in the other Agencies. For instance, representatives of ARS and CSREES actively participate on the REE Agricultural Bioenergy and Bioproducts Research, Education and Economics Council (ABBREE Council) which formally meets every other week. In addition, CSREES National Program Leaders for bioenergy participate in ARS bioenergy workshops, such as the Customer-Stakeholder Workshop in September, 2007.

**Finding 3 USDA Underreported Renewable Energy Funding to the Office of Management and Budget**

*Recommendation 5* - Prepare a memorandum to the appropriate agency officials emphasizing the need to accurately identify and submit to OBPA renewable energy activities.

*Recommendation 6* - Conduct a training session where appropriate Departmental and agency budget officials review the issues identified by our audit.

*Recommendation 7* - Revise the OBPA report format to include all programs that provide funding for renewable energy activities.

- On page 18, the report mentions that ARS officials failed to identify 25 projects under OBPA's guidelines to identify renewable energy projects. We have taken steps to address this issue in February 2008, and, as we have indicated previously, would appreciate this noted in the report.

**Finding 4 USDA's Web-Based Renewable Energy Outreach System Needs Modification**

**Recommendation 8**

Update data in the USDA Energy Matrix.

**Recommendation 9**

Develop procedures to ensure the accuracy of information submitted for inclusion in the USDA matrix.

# Exhibit B – Agency Response

Comments and Responses  
U.S. Forest Service  
OIG Official Draft Audit Report No. 50601-13-CH  
Implementation of Renewable Energy Programs in USDA Forest Service

Item 1

Page ii – Statement - “We did find that the Forest Service (FS) made an effort to place emphasis on renewable energy in two regions.”

Response: The summary statement infers, although not intentionally, that the FS did not place any emphasis in the other regions. If you refer to the supporting information in the report (Page 8, 3<sup>rd</sup> paragraph), it clearly states that the FS “place emphasis ... (in the agency)” and goes on to explain that the FS had two regions with full time coordinators. It also explains that the other regions had coordinators with collateral duties. The intent of the text was not correctly summarized.

Recommendation: Change the above statement to “We did find that the Forest Service (FS) made an effort to place emphasis on renewable energy by establishing regional coordinators - two regions had full-time coordinators.

Corrective Action: None needed.

Item 2

Page 15 – Statement - “FS relies solely on its scientists to verify that propose research is not duplicative. The agency has no formalized procedures to verify that research does not duplicate efforts being performed at other agencies.

Response: FS scientists do provide information to and use the CRIS system to exchange information about ongoing research. CRIS may not be sufficient enough for forestry applications to be the only formal method to reduce duplication, but certainly is an important one. It should not be relied on as the only source of information about current activities – there are other processes, mostly informal, such as reviewing literature, attending conferences, meetings with colleagues, etc.

Recommendation: The agency will work to ensure that CRIS is used appropriately.

Corrective Action: Provide a letter to all scientists reminding them of the value of CRIS as one tool to use in research planning. To be done by November, 2008.

Item 3

Page 19 – Statement - “FS’ data systems were unable to track the disposition of woody biomass from agency forests. Furthermore, the data system did not include over 1.5 million of WBUG Program grant funds provided for energy projects.”

Response: The Agency is looking at developing linkages between the TIM and FACTS data systems within the Corporate Data Warehouse (CDW) and IWEB to include more

## **Exhibit B – Agency Response**

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than just the disposition of woody biomass associated with the WBUG Program grants and the National Forest System. Currently, these programs are cross-checked manually every year, which is the most cost effective manner. The statement about the \$1.5 million must be referring to a congressional mandate that was only a pass-thru and was not formally a part of the program and therefore was not tracked.

Recommendation: Improve the second statement so that it does not infer that the FS made an error in reporting. It should be changed to “Furthermore, the data system did not include a \$1.5 million of WBUG Program congressional mandate provided for energy projects.”

Corrective Action: Continue to improve the biomass tracking systems for FS lands by modifying existing data systems by FY09. Continue to cross-check the biomass removals with the WBUG Program grants in the most cost effective manner possible. Add congressional mandates in the annual cross-check reporting.

NRCS comments on OIG Audit 5061-0013-CH Implementation of Renewable Energy Programs in USDA

There are very few places where NRCS is mentioned in the document, so as a result, the comments from NRCS are minor.

- 1) Page iii, 1<sup>st</sup> paragraph; “NRCS did not use criteria that gave priority to renewable energy projects. At those agencies, managers use normal program criteria based on the program’s mission to select a project.” Comment: NRCS programs select projects based on resource concerns laid out in legislation, and program rules based on that legislation. Would suggest rewording to – “NRCS did not use criteria that gave priority to renewable energy projects due to lack of legislative authority to do so in its programs.”
- 2) Page iv, 3<sup>rd</sup> paragraph; “Also, RBS has three programs that, along with RUS’ EL Program and NRCS’ Environmental Quality Incentive and Conservation Innovation Grants programs, funded anaerobic digesters.” Comment: this is true, but the projects are funded to address different purposes. NRCS digesters are funded to address air quality issues from livestock operations. In order for the project to be funded, the existence of an air quality problem due to livestock waste must exist. Similar projects funded by other agencies in other mission areas likely take into account different sets of criteria to base funding on. Due to this aspect, although the means might be similar, the intent and outcomes from these projects across agencies might be vastly different, and thus, non duplicative. This point should be mentioned.
- 3) Page 18, 3<sup>rd</sup> bullet; “At NRCS, officials did not include \$9.6 million in renewable energy funding through agency programs because of the difficulty in gathering those figures from the agencies data system.” This gives the impression that the funds were unaccounted for. Suggest rewording to; “At NRCS, officials did not include \$9.6 million in funding which could have been attributed to renewable energy, because the funding was recorded in the agencies data systems under the resource concerns the funds addressed and thus were not retrievable as renewable energy funding.”

Informational copies of this report have been distributed to:

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Under Secretary for Natural Resources and Environment	(1)
Under Secretary for Research, Education and Economics	(1)
Under Secretary for Farm and Foreign Agricultural Services	(1)
Agricultural Research Service	
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Director, Operations Review and Analysis Staff	(3)
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