Statement of Dallas Tonsager Under Secretary for Rural Development U.S. Department of Agriculture

Before the Subcommittee on Conservation, Credit, Energy, and Research U.S. House Committee on Agriculture October 29, 2009

Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to appear before you to discuss the future of second and third generation biofuels.

President Obama and the Department believe that the research and commercialization of second and third generation has enormous potential to reduce our dependence on fossil fuels. The Department is anxious to work with other Federal agencies as well as the private sector the make this potential a reality.

I know that this Subcommittee, and a bipartisan majority in the Congress as a whole, share that commitment, as reflected in the Food, Conservation, and Energy Act of 2008 [2008 Farm Bill]. I therefore want to begin by commending your vision and leadership in this effort, and by acknowledging the critical contributions made by our partners elsewhere in government and in the private sector as well.

Today I will be discussing USDA Rural Developments advanced biofuels programs but I would be remiss if I failed to note that we are one part of much broader departmental and Federal effort. Secretary Vilsack has articulated a strategic vision for rural America that

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emphasizes a safe, abundant, and secure food supply; rural communities that are vibrant, self-sustaining, and repopulating; an emphasis on local and regional food networks; a commitment to economic opportunity and wealth creation in rural America; and a recognition of the importance of our nation's farms and forests in the global battle against greenhouse gas emissions. The transition to second and third generation biofuels is a key part of that strategy.

Advanced biofuels hold the potential to transform America's fuel supply, enhance our national security and energy security, reduce our carbon footprint, and foster economic growth in rural America. This is an enormous opportunity, and it will require the best efforts of many parties in many sectors -- the federal government, national and university labs, state and local governments, and the private sector -- to ensure that these multiple potentials are realized.

USDA is a leader in this area, on several fronts. I am privileged today to be testifying with Dr. Rajiv Shah, Agriculture Under Secretary for Research, Education, and Economics (REE). Dr. Shah will describe described REE's cutting edge research in both basic and applied science related to advanced biofuels.

At USDA Rural Development, in addition to our other economic development activities, we begin with the challenge of helping emerging renewable energy technologies become commercially viable. Once commercial feasibility is demonstrated, we support the buildout of the advanced biofuels industries in rural communities. We work to ensure that

agriculture producers, rural entrepreneurs, rural businesses, and rural communities share fully in the economic rewards of rural renewable energy.

America's -- and the world's -- energy systems are changing. This will be a long process requiring vision, determination, and leadership -- but it is within our reach to give our children and grandchildren a cleaner, domestically produced, environmentally sustainable, and secure energy system. The Obama Administration is committed to that goal. We are laying the foundation now, and advanced biofuels are among the most important near-term deliverables in this long-term transformation.

Congress initially recognized this potential by providing, in the Farm Security and Rural Investment Act of 2002 [2002 Farm Bill] a first-ever energy title, which charged USDA with supporting the development of renewable energy in rural America. The 2008 Farm Bill built on that foundation and significantly expanded our authorities.

From Fiscal Year 2001 through Fiscal Year 2008, USDA Rural Development funded 2,489 grants and loans totaling over \$860 million for renewable energy and energy efficiency projects. More than 100 of these projects and over \$200 million of the funding were investments in biofuels. We are still validating the 2009 figures, which will -- in a single year -- add over 1,500 projects and more than \$100 million in aggregate investment to the tally. No fewer than 10 separate Rural Development programs contributed to these totals. Technologies funded ranged from biofuels and other biomass to wind, solar, geothermal, hydro, ocean, digesters, and landfill gas recovery systems.

This is already paying dividends. Since the beginning of this decade, the United States has become a leader in biofuels, wind energy, geothermal, solar thermal, solar photovoltaics and biomass.

Our topic today is advanced biofuels. A wide range of technologies are in play. These are at various stages of development. Some are maturing now and, [as Dr. Shah will discuss], we anticipate a continuous stream of innovation for the foreseeable future. Our task at USDA Rural Development is to identify viable technologies as they emerge from the labs and accelerate their deployment across the private sector.

In the 2008 Farm Bill, the Congress provided a powerful suite of programs to support this effort. On May 5, 2009, the President's Directive on Biofuels and Economic Development required USDA to implement many of our new renewable energy Farm Bill programs within 30 days. We met that target and are beginning to show results. I would like to give you a snapshot of where we stand today:

Section 9003: Biorefinery Assistance Program.

The Biorefinery Assistance Program (Section 9003) is targeted directly to the commercialization of second and third generation feedstocks. It provides loan guarantees for the development, construction and retrofitting of viable commercial-scale biorefineries producing advanced biofuels, and authorizes grants, subject to annual

appropriations, to help pay for the development and construction costs of demonstrationscale biorefineries producing advanced biofuels.

Two application rounds have been completed to date. Two awards have been announced for a total of \$105 million and two more applications from the initial rounds remain under consideration.

For Fiscal Year 2010, the Farm Bill provided \$245 million in mandatory budget authority an estimated (approximately \$691.6 million in loan guarantees). As potential applicants gain familiarity with this program and as the national economy continues to recover, we anticipate continued growth in interest and applications in this program.

Section 9004: Repowering Assistance.

The Repowering Assistance Program (Section 9004) provides payments for biorefineries (that were in existence at the time the 2008 Farm Bill was passed) to replace fossil fuels used to produce heat or power to operate the biorefineries with renewable biomass. The Farm Bill made available \$35 million in mandatory funding to remain available until expended. Of this total, \$20 million was allocated for the initial funding round, which was advertised in June 2009 with the application window closing November 1, 2009. As of October 20, one Section 9004 application had been received. We anticipate that a proposed and final rule will be published in late 2010 with the remaining funds to be made available at that time.

Section 9005: Bioenergy Program for Advanced Biofuels.

The Bioenergy Program for Advanced Biofuels (Section 9005) provides payments for eligible agricultural producers to expand production of advanced biofuels. The Farm Bill made available \$55 million in mandatory funding for FY 2009, of which \$30 million was allocated.

Of the 180 applications that were received for Fiscal Year 2009 production, 160 applications were deemed eligible. The contract period was from October 1, 2008 through September 30, 2009. We anticipate that the \$30 million available to support Fiscal Year 2009 production will be paid as a one-time payment to eligible producers during the first quarter of Fiscal Year 2010. The remaining \$25 million in unexpended FY 2009 funding plus the \$55 million in mandatory funding for Fiscal Year 2010 will be available for payment in the first quarter of Fiscal Year 2011 once the public has commented on a proposed rule and a Final Rule has been issued.

Section 9007: Rural Energy for America Program.

The Rural Energy for America Program (Section 9007) expands and renames the program formerly called the Renewable Energy Systems and Energy Efficiency Improvements Program (Section 9006). This program has provided grants and loan guarantees for energy efficiency and renewable energy projects ranging from biofuels to wind, solar, geothermal, methane gas recovery, and other biomass projects. Under the 2008 Farm Bill, hydroelectric and ocean source technologies were added as eligible purposes.

For Fiscal Year 2010, the Farm Bill provided \$60 million in mandatory budget authority. The Fiscal Year 2010 agriculture appropriation, Public Law 111-80 provides an additional \$39, million in discretionary budget authority.

While not targeted specifically to advanced biofuels, the Section 9007 Program is a potential source of support once advanced biofuels technologies mature. To be eligible, a project must be commercially viable. From Fiscal Year 2001 through 2008, Rural Development invested over \$195 million in 96 ethanol and biodiesel projects. Twenty-seven of these projects were funded through the Section 9007 program.

Other Rural Business Programs.

Looking ahead, as advanced biofuels technologies develop, we anticipate that many will become eligible for more conventional forms of financing once they become commercially viable, including USDA Rural Development's flagship business development program, the Business and Industry Loan Guarantee Program (B&I). In the long run, our expectation is that successful technologies will graduate to full private financing. We will have fully succeeded when our assistance is no longer needed.

In the short run, we still face an economic recession compounded by an unprecedented credit crisis. These factors have affected capital investment in all sectors, including investment in new and emerging technologies.

At the same time, commodities prices have been unstable. The conventional ethanol industry has been impacted over the past year, first by a spike upwards in feedstock prices and then by a recession-induced collapse of oil prices. Stability and profitability is returning to that industry, but we are still working our way through a difficult period.

Finally, there is a degree of policy uncertainty that is affecting current investment decisions. The President is committed to vigorous and effective action to reduce the nation's carbon footprint. The time is now for the United States to lead in the effort to reduce greenhouse gas emissions. Enactment of the President's climate change initiative is important for many reasons. Acceleration of the deployment of advanced biofuels is one of them.

In closing, it is important to note that these challenges and uncertainties are inherently temporary. In the long run, all of us understand that we will continue to face the national security imperative of diversifying away from oil. We will continue to face the environmental imperative of reducing greenhouse emissions. And as the global economy rebounds, we will potentially face the supply constraints that pushed the price of oil from less than \$20 a barrel a decade ago to nearly \$150 a barrel just over a year ago.

We will continue to live in global economy, which will place ever-increasing pressure on commodities prices and legacy business structures. The need to diversify our energy choices and explore new technologies is clear, and advanced biofuels will play a strategic role in ensuring our competitiveness and prosperity in the years to come.

For all these reasons, we are investing now in new technologies that will pay dividends for decades to come. There are always uncertainties. There will always be surprises. Neither markets nor technologies are static. But we are clearly reaching the point at which biofuels will soon be cost competitive with conventional oil, and the trend lines are clear.

This is an area where the United States is already a world leader. We are operating from a position of strength. The Congress clearly defined the objective in the 2008 Farm Bill, and the Obama Administration is fully committed to the goal. The present difficulties notwithstanding, I am optimistic about the future, and I look forward to working with you to keep this vital initiative on track. Thank you.