## Statement of

Keith Hall Commissioner Bureau of Labor Statistics

September 22, 2011

I am pleased to be here today to provide a summary of activities underway in the Bureau of Labor Statistics (BLS) to measure employment in "green jobs." BLS is, as you know, an independent statistical agency that is the principal Federal source for information on employment and unemployment, inflation, wages and benefits, worker safety and productivity. Our mission is to provide relevant, accurate, timely, and objective statistical data to help inform policymakers and the public. All of our data products, including the upcoming green jobs data, meet these high standards. To protect our impartiality and independence, we take no role in policy making and do not conduct policy analysis ourselves.

BLS received funding beginning in Fiscal Year 2010 to develop and implement the collection of new data on green jobs. The goal of the BLS green jobs initiative is to develop information on (1) the number of and trend over time in green jobs, (2) the industrial, occupational, and geographic distribution of the jobs, and (3) the wages of the workers in these jobs.

To measure green jobs, BLS first had to develop an objective, measureable definition. BLS began by reviewing work done by other national statistical agencies, such as Statistics Canada and Eurostat, as well as work done by various State labor market information offices and by nonprofit organizations. Looking at

these studies, BLS found the common thread running through the various definitions is that green jobs help to preserve or restore the environment or conserve natural resources. BL/S engaged in extensive outreach and consultation with other Federal agencies with expertise in various aspects of jobs and then published a draft green jobs definition in a March 2010 Federal Register Notice. BLS received about 150 comments on this proposed definition as well as additional feedback from Federal stakeholders, including the Department of Energy, Environmental Protection Agency, and the Council on Environmental Quality, at an interagency discussion organized by the Office of Management and Budget in April 2010. In a September 21, 2010, Federal Register Notice, BLS announced its final definition of green jobs for the purposes of statistical data collection. Under this definition, there are two different types of jobs that qualify as green jobs:

- Jobs in business establishments that produce goods or provide services that benefit the environment or conserve natural resources. BLS refers to these as green goods and services jobs.
- Jobs in which the work performed makes the production processes of business establishments more environmentally friendly or use fewer natural resources. BLS refers to these as green technologies and practices jobs.

The first step for BLS in measuring green goods and service jobs was to identify sectors and industries within which goods and services that directly benefit the environment are produced. In total, BLS identified over 300 detailed industries, as defined by the North American Industry Classification System, where green goods and services are produced. Some examples are:

the Utilities sector, which produces electricity from renewable sources; the Manufacturing sector, which produces Energy Starcertified appliances; the Agriculture sector, which produces organic crops; the Construction sector, which provides weatherization services; and the Professional and Business Services sector, which provides environmental consulting services.

The next step for BLS, currently underway, is to conduct the Green Goods and Services survey to identify the proportion of each industry that is engaged in producing green goods and This survey was sent in May 2011 to a sample of services. 120,000 business establishments in the industries identified as producing green goods and services. The survey presents these business establishments with a description of the green products or services classified in their respective industries and asks respondents to estimate the share of establishment revenue accounted for by the green outputs. BLS determined through pretesting that establishments could easily and reliably report this information; however, establishments that produce both green and non-green outputs had difficulty in directly reporting the number of jobs linked to the former. Thus, to estimate green jobs, BLS will assume that the share of employment working on green goods and services is equal to their share of revenue. This, of course, is an approximation that will hold exactly when certain conditions are satisfied, namely, that an establishment's production processes for producing green and other goods exhibit constant returns to scale, as is assumed by input-output models, and use similar inputs in similar proportions.

Based on the survey, BLS will produce data on green goods and services employment for the U.S. by industry, and for States, by industry sector. The first estimates will be available in early 2012. To provide information on the change over time in green goods and services employment, BLS will update green employment estimates quarterly using administrative records of the Unemployment Insurance system and will re-administer the Green Goods and Services survey annually. To provide an occupational profile of green goods and services employment and wages, BLS has augmented the existing Occupational Employment Statistics survey by adding establishments sampled for the Green Goods and Services survey. This occupational profile will be released by BLS in the fall of 2012.

To measure green technologies and practices jobs, BLS is conducting a special employer data collection called the Green Technologies and Practices survey. Businesses in any industry may use green technologies and practices, regardless of the nature or "greenness" of their outputs. Therefore, the Green Technologies and Practices survey will be sent to a sample of about 35,000 business establishments selected from all U.S. industry sectors. Respondents will be presented with descriptions of various types of technologies or practices that benefit the environment or conserve resources and asked to indicate, which, if any, are utilized by the business establishment. Examples of such practices are producing energy from solar panels for use within the business establishment, redesigning product packaging to reduce use of plastics, and reusing scrap materials.

At business establishments that use such practices, respondents will be asked to provide information about the number of employees who spend at least half their time engaged in this work, and their occupations and wages. Again, BLS

determined through pretesting that establishments could easily and reliably report this information with minimal burden. The survey will be sent in September 2011. National data by industry sector and occupation on employment in green technologies and practices jobs will be available in mid-2012.

The budget increment BLS received in 2010 also included a small funding increase for the BLS Employment Projections program to support the development of career information on green jobs. In 2010, BLS published "Careers in Wind Energy." So far, in 2011, BLS has published "Careers in Solar Power" and "Careers in Green Construction." These articles are published on-line on a new green careers web page and were featured on both the BLS and the Department of Labor's public home pages, on the Employment and Training Administration's Workforce-3-One green jobs site, and other venues. To date, the wind energy article had about 78,000 page views since it was published in September 2010, while the solar power article had about 42,000 views since its publication in mid-June, and the green construction article had 18,000 views since its publication in July. Additional articles on green careers will be released periodically.

I will be happy to take any questions that you may have.

## Dr. Keith Hall, Commissioner of the Bureau of Labor Statistics

Dr. Keith Hall serves as the Commissioner of the Bureau of Labor Statistics (BLS). He was confirmed by the Senate in December 2007 and officially sworn-in to office in January 2008 for a four year term. The BLS is a 2,500-person organization and is the principal fact-finding agency for the Federal Government in the broad field of labor economics. The Bureau operates two dozen surveys and programs that measure employment and unemployment, compensation, worker safety, productivity, and consumer and price movements. He has a B.A. degree from the University of Virginia and a M.S. and Ph.D. from Purdue University.

Prior to his current position, Dr. Hall had eighteen years of federal service with the Department of the Treasury, the Department of Commerce, the International Trade Commission, and the Executive Office of the President. Most recently, he served as Chief Economist for the White House Council of Economic Advisers where he analyzed a broad range of fiscal, regulatory and macroeconomic policies and directed a team that monitored the state of the economy and developed economic forecasts.

Dr. Hall also served as the Chief Economist for the U.S. Department of Commerce for four years. In that role, he was the principal economic advisor to the Under Secretary for Economic Affairs, and served as a special adviser to the Secretary of Commerce and as a member of the Secretary's principal management team.

Dr. Hall previously served as a Senior International Economist in the Research Division at the U.S. International Trade Commission — an independent agency conducting general investigations on any matter involving tariffs and international trade, including conditions of competition between U.S. and foreign industries. He has been on full time faculty in the Economic Departments at the Universities of Arkansas and Missouri, and has published a number of papers on international trade and international trade policy.