



**SOCIAL SECURITY**  
Office of the Chief Actuary

June 19, 2009

The Honorable Charles B. Rangel  
Chairman, Committee on Ways and Means  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

As you requested, our team of actuaries and economists in the Office of the Chief Actuary has produced a preliminary illustrative estimate of the potential effect on the financial status of the Social Security program of “The American Clean Energy and Security Act of 2009”, H.R. 2454, as reported by the House Committee on Energy and Commerce on May 21, 2009. We have worked closely with Ways and Means Committee staff, as well as staff of the Environmental Protection Agency (EPA), the Energy Information Administration (EIA) of the Department of Energy, and the Congressional Budget Office (CBO) in constructing a plausible illustrative scenario representing the likely effects of enactment of the bill on the economy. On the basis of the assumptions developed for this illustrative scenario, we estimate that enactment of the bill would reduce the long range actuarial balance of the combined OASI and DI Trust Funds by about 0.04 percent of taxable payroll over the 75-year long-range projection period. This estimate is made reflecting the intermediate assumptions of the 2009 OASDI Trustees Report.

The direct effect of this bill is intended to be a reduction in total carbon emissions of 83 percent from the level in 2005 by 2050. Because we project that the real gross domestic product (GDP) for the United States will roughly double between 2005 and 2050, this would represent a very substantial change in carbon emissions. Due to the magnitude of the reduction and the means by which the reduction would be accomplished, it is widely expected that enactment of the bill will result in an increase in prices of goods and services and some reduction in real GDP, starting in 2012. The magnitude of these effects is highly uncertain. Numerous features of the bill are highly complex and still somewhat unclear. The market for energy credits and the opportunity to purchase credits from foreign producers further complicates the analysis. In the simplest terms, we conclude, based on the model results from the EIA and the EPA, that constraints on the market to yield the reductions in emissions required by the bill will change the business practices of energy producers in ways that will make energy production more costly, and that this will result in higher prices in general and a slightly reduced level of output from domestic industry. These “costs” thus represent the price of reducing carbon emissions by over 90 percent from the level that might otherwise have occurred by 2050.

We have studied the specific effects on price levels, the level of GDP and interest rates projected in models used by the EIA and the EPA. Model results have been available from the EIA for the Lieberman-Warner Bill S. 2191 and from the EPA for both S. 2191 and H.R. 2454. The EPA has engaged two models to develop a range of projected results. Based on the projections of the

EIA and the EPA we have developed a plausible illustrative scenario to show the potential effects on the economy and Social Security's financial status. For this illustration, we have assumed that the level of real GDP will be reduced by between 1.3 and 2.2 percent by the year 2050 and the level of the Consumer Price Index (CPI) will be increased by between 2 and 3 percent by the year 2050, compared to the levels projected in the absence of the enactment of H.R. 2454. It would be difficult to overemphasize the uncertainty associated with these assumptions. It is because of this extreme uncertainty that we are at this time deeming this analysis to be an illustration rather than our best estimate of the impact of enactment.

In developing this illustration, we have made the simplifying assumption that the reduced level of real GDP and the elevated level of prices would occur at gradual rates between 2012 and 2050. A case can be made for assuming these changes will be concentrated either earlier or later in the period. For this illustration, however, we have assumed the middle course. Based on these guidelines, our illustration reflects an increase in the annual rate of CPI price inflation of 0.067 percent, an increase in the annual rate of GDP price inflation of 0.05 percent, a decrease in the annual rate of increase in real GDP of 0.05 percent, and an increase in the real interest rate for long-term Treasury bonds of 0.067 percent. Because we are using changes in the assumed rates of growth in real GDP and GDP price levels of equal magnitude, but in opposite direction, the projected level of nominal (current dollar) GDP and earnings is unchanged in this illustration from the levels in the intermediate assumptions of the 2009 Trustees Report. Thus, the impact on the cash-flow of the OASDI program is reflected in the higher rate of increase in the CPI, which implies a reduction in the real growth rate in earnings.

The table below provides the projected effect of the bill on the current-dollar cash flow for the OASDI program under the assumptions described above. This change in cash flow represents the projected combination of changes in tax revenue and changes in benefit payments.

The American Clean Energy and Security Act of 2009, H.R. 2454  
Illustrative Scenario of Effect on Social Security (OASDI)

<u>Fiscal</u> <u>Year</u>	<u>Change in OASDI</u> <u>Cash Flow</u> <i>Billions of Current Dollars</i>
2010	0.0
2011	0.0
2012	0.0
2013	-0.4
2014	-1.0
2015	-1.6
2016	-2.3
2017	-3.0
2018	-3.8
2019	-4.7

Based on Intermediate Assumptions of the 2009 Trustees Report  
Office of the Actuary  
Social Security Administration

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Under this illustrative scenario, the combined OASI and DI Trust Fund would become exhausted a few months earlier, late in 2036 rather than early in 2037. The first year for which OASDI cost

would exceed tax revenue would be unchanged, at 2016. The actuarial deficit of the OASDI program would be increased by 0.04 percent of payroll, from a deficit of 2.00 percent of payroll under current law to a deficit of 2.04 under the bill.

I hope this preliminary estimate for the illustrative scenario will be helpful in the consideration of H.R. 2454. Pursuant to a similar request, I am also providing this information in a letter to Representative Dave Camp, Ranking Member of the Committee. If I may be of any further assistance regarding this bill or any other matter, please let me know.

Sincerely,

A handwritten signature in black ink that reads "Stephen C. Goss". The signature is written in a cursive style with a large initial 'S'.

Stephen C. Goss  
Chief Actuary