**The Social Cost of Greenhouse Gases**

The social cost of greenhouse gases is a measure of the long-term economic harm expressed as the dollar value of the total damages from emitting one ton of the gases into the atmosphere. The current central estimate of the social cost of carbon (SC-CO2) is over $50 per metric ton in today's dollars. The costs assigned to a metric ton of methane is $1500, and $18,000 to a metric ton of nitrous oxide

This vital tool helps federal agencies make sound decisions to protect current and future generations of Americans. By properly accounting for the damages caused by carbon pollution, agencies can properly evaluate policies that affect greenhouse gas emissions.

As the climate continues to change, millions of poor people face greater challenges in terms of extreme events, health effects, food security, livelihood security, migration, water security, cultural identity, and other related risks.

The social cost of greenhouse gases is used to estimate in dollars all economic damage that would result from emitting one ton of carbon dioxide into the atmosphere. It indicates how much it is worth to us today to avoid the damage that is projected for the future.

The discount rate used in estimating the social cost of greenhouse gases incorporates both empirical evidence and value judgments. In the modeling process, future damages are converted into present-day value by using a discount rate to determine how much weight is placed on impacts that occur in the future. Future costs and benefits are generally considered less significant than present costs and benefits, and the discount rate reflects this level of relative significance. A high discount rate means that future effects are considered much less significant than present effects, whereas a low discount rate means that they are closer to equally significant.