

Analysis of Bush Administration Greenhouse Gas Target

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<u>UPDATED</u>, February 12, 2003. Based on new GDP projections issued by the U.S. Energy Information Administration, WRI has recalculated the greenhouse gas implications of the Bush Administration Target. As shown below, the target allows U.S. emissions to increase by 14.3 percent over the 2002-2012 period. This is slightly larger than last year's calculation, which showed an emissions increase of 14.1 percent over the period. This small increase in emissions allowed under the target is due to a small increase in projected GDP.

The Bush Administration has announced a new approach on global climate change. This includes a strategy to cut greenhouse gas intensity by 18 percent over the next 10 years. This approach differs from more traditional emission targets which set absolute caps on greenhouse gas emissions (e.g., Kyoto Protocol-style targets). Greenhouse gas (GHG) intensity measures the ratio of greenhouse gas emissions to economic output, usually expressed in terms of gross domestic product (GDP, the measure of total domestic economic activity).

What does this new GHG intensity target mean for future greenhouse gas emission levels in the United States? The table below compares the projected results from the Bush Administration target with the figures from the most recent 10-year period.

Table. Historical Changes (1990-2000) vs. Bush Target (2002-2012), percent				
	Historical (1990-2000)		Bush Target (2002-2012)	
	Annual	Total	Annual	Total
Greenhouse gases (GHGs)	1.3	14.2	1.3	14.3
Gross Domestic Product (GDP)	3.2	37.0	3.3	38.6
GHG Intensity	-1.8	-16.7	-1.9	-17.5

Between 1990 and 2000, GHGs emissions have increased by an average of 1.3 percent per year (14.2 percent total over the decade), while the economy grew by about 3.2 percent per year (37.0 percent total). As a result, GHG intensity declined at an average rate of 1.8 percent per year (-16.7 percent total) over the 1990 to 2000 period. In other words, a falling GHG intensity is normal, since GDP typically rises faster than GHG emissions.

The President announced a goal of reducing GHG intensity from 183 to 151 tons per million dollars of GDP over the 2002 to 2012 timeframe. This represents a 17.5 percent reduction in GHG intensity. This is similar to the actual performance of the 1990s (16.7 percent reduction). Because of projected GDP increases, a GHG intensity decline of this size actually implies a **14.3 percent increase in the absolute levels of greenhouse gas emissions by 2012**, again, comparable to the emissions rise in the 1990s. Overall, the President's GHG goal is similar to past emission growth rates and will not, under any plausible scenario, actually *reduce* greenhouse gas emissions.

Sources:

<u>Historical</u> **a.** GHGs: 1990 - 2000: 2002 National Inventory Tables, US EPA, online at: http://yosemite.epa. gov/OAR/globalwarming.nsf/content/ResourceCenterPublicationsGHGEmissionsUSEmissionsInventory2002Tables. html. **b.** GDP: Bureau of Economic Analysis, National Accounts Data (GDP), http://www.bea.doc.gov/bea/dn1.htm. <u>Projections for Bush Target</u> GDP and GHG projections: U.S. Energy Information Administration, Supplement Tables to the Annual Energy Outlook 2003. January 9, 2003. Available online at: http://www.eia.doe.gov/oiaf/aeo/supplement/index.html. (Projections were for CO₂ only; WRI assumed the same growth rate for all greenhouse gases.)