President says CO_2 emissions have declined - have they?

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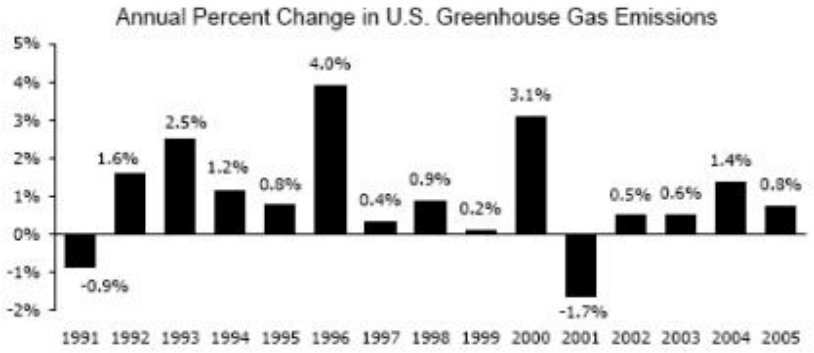
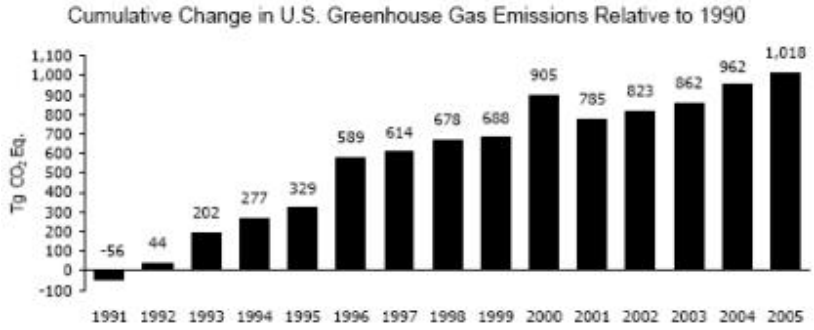
Yesterday, President Bush stated that carbon dioxide (CO_2) emissions in 2006 declined 1.3 percent, "putting us well ahead of what is needed annually to meet my greenhouse gas intensity reduction goal of 18% by 2012." There are two problems with what he said:

1. The so-called "decline" is most likely a short-term dip in an upward trend.
2. The President's goal is insufficient to halt global warming.

The graphs below come from an EPA report Trends in Greenhouse Gas Emissions [PDF]. The first graph shows the annual percent change in greenhouse gas emissions from 1991 to 2005. As you can see, emissions fluctuate from year-to-year, and in some years they go down. In 2001, for example, emissions dropped 1.7 percent.



But when you look at the cumulative trend, you see a different picture. The second graph shows that, despite some year-to-year fluctuations, U.S. greenhouse gas emissions are trending steadily upward, rising nearly 20 percent in the last 15 years.



Even more important, the President's emissions targets are not adequate to stop global warming. He mentioned two targets in his statement:

> Reduce greenhouse gas (GHG) intensity by 18% by 2012
>
> Reduce the growth of emissions by 20% in the next 10 years

GHG intensity is an irrelevant measure. Declining GHG intensity just means less energy consumed per unit of production. If economic output grows more quickly than emissions, emissions still can increase though intensity declines. From 1990 to 2004, GHG intensity fell by nearly 20 percent while total emissions increased by 20 percent.

The second target, first announced in the State of the Union address, is to reduce the *growth* of emissions, not total emissions. It calls not for an absolute reduction, but for a reduction in the rate of increase. According to the President's initiative, emissions can continue to rise; they'd just rise 20 percent less than they would otherwise. That is not enough.

In Part 3 of my series on "Action Needed to Stop Global Warming", I discussed what the U.S. emissions target needs to be and why. To do its part in stopping global warming, the U.S. must reduce emissions 10 to 30 percent *below current emissions* by 2020, and 60 to 80 percent by 2050. Note that this is an absolute reduction, not a decrease in the growth rate.

Statements like this from the President can confuse people. Please help by passing along this clarification to anyone you know who may have taken yesterday's statement at face value.