

**API Technical Comments on  
Chapter 5 of Draft *Third U.S. Climate Action Report*  
for Submission to the UNFCCC**

Three of the data series reported in Table 5-1 (page 4) of draft Chapter 5 appear to be inaccurate, perhaps due to errors in conversion from different base years. The data of concern is identified below and also described in the attached table.

- Real GDP (billions of 2000 dollars) 1997 CAR.  
The conversion of the 1997 CAR (Table 4-3) real GDP from 1995 dollars to 2000 dollars does not appear to be accurate. Based on the attached table, the conversion should be made using a factor of 1.089822 not a conversion of 1.019 that was apparently used.

Using the suggested conversion, the 1997 CAR real GDP numbers converted to 2000 dollars would be \$8,724 billion, \$10,620 billion and \$12,270 billion for 2000, 2010, and 2020, respectively.

- Real GDP (billions of 2000 dollars) 2001 CAR  
The data in Table 5-1 for the 2001 CAR is exactly as printed in EIA's Annual Energy Outlook-2002. However, the AEO 2002 reports GDP in 1996 dollars, not 2000 dollars as listed in CAR Table 5-1.

Converting the AEO 2002 GDP data from 1996 dollars to 2000 dollars, as indicated on the attached table, yields the following real GDP data in 2000 dollars: 2000, \$9,862 billion; 2010, \$13,163 billion; 2020, \$17,667 billion.

- Energy Intensity (Btu per 1996 dollar GDP) – 1997 CAR  
The energy intensity data in the 1997 CAR (Table 4-3) is given in 1995 dollars, so this needs to be converted to 1996 dollars for the 2001 CAR. The conversion appears to be inaccurate. Using the data from the following table, the correct conversions appear to be: 2000, 11,893; 2010 10,562; and 2020, 9,623.

The related text on page 3, lines 11-13 is still accurate and does not need to be changed even if the suggested corrections are adopted. The observations made in these lines are accurate and relevant, and should be retained.

**Error Corrections/Explanation for Table 5-1**

	1995	1996	1997	1998	1999	2000	2010	2020
<b>GDP Chained GDP Deflator Data from DOC/BEA</b>								
nominal	7400.5	7813.2	8318.4	8790.2	9299.2	9962.7		
96\$ Chained	7543.8	7813.2	8159.5	8515.7	8875.8	9318.6		
Deflator	0.981	1.000	1.019	1.032	1.048	1.069		
Ratio of Deflators: 2000/1995 =			<b>1.089822</b>					
Source: DOC/BEA								
<b>ERROR IN CONVERTING CAR '97 REAL GDP FROM 95\$ TO 2000\$ FOR TABLE 5-1</b>								
<b>CAR '97</b>								
Reported Real GDP (95\$) (from CAR '97 - Table 4.3)						8,005	9,745	11,259
<b>CORRECTED:</b>						<b>8,724</b>	<b>10,620</b>	<b>12,270</b>
Real GDP (2000\$): Using 2000 to 1995 Ratio of Deflators								
<i>Apparent source of error in</i>								
CAR '2001 Draft								
Real GDP (2000\$) from 1997 CAR						8160	9934	11477
Implied Conversion of 95\$ to 2000\$ ==> apparent error						1.019	1.019	1.019
<b>Error in converting Real GDP from EIA AEO 2002 (reported in 96\$) to 2000\$</b>						2000	2010	2020
Real GDP (2000\$) reported in Chap 5 page 4, Table 5-1						9,224	12,312	16,525
PROBLEM: these are <b>directly</b> from EIA AEO 2002, Table A20 BUT the EIA gives Real GDP projection is in <b>1996\$, not 2000\$</b>								
EIA AEO 2002 Real GDP in 2000\$ would be:						<b>9,862</b>	<b>13,163</b>	<b>17,667</b>
<b>Error in converting '97 CAR Energy Intensity from 95\$ to 96\$</b>						2000	2010	2020
2001 CAR - Chap.5 Table 5-1 Energy Intensity reported from '97 CAR (as btu/96\$GDP)						11,775	10,458	9,528
1997 CAR (Table 4-3) Energy Intensity Conversion								
Conversion of 95\$ to 96\$ for BTU/real GDP calculation						1.0193636	1.01936356	1.01936356
Energy Intensity reported in 1997 CAR (in 95\$)						12,123	10,767	9,809
<b>Conversion of 95\$ to 96\$ for BTU/real GDP projection from '97 CAR</b>						<b>11,893</b>	<b>10,562</b>	<b>9,623</b>