

Changing the Base Year for the Index

What difference does it make if the base period is 1996 rather than 1985?

The intensity indexes presented on this website are based to the year 1985. 1985 was chosen, in part, because that year was the start of the period when the U.S. entered into a low energy price regime. Changing the base period alters the perspective on what changes have occurred, but fundamentally does not alter the results. The federal government periodically changes the base year for major economic indicators such as the Consumer Price Index, Real Gross Domestic Product, and the Producer Price Index. This periodic rebasing avoids "drift." This drift can be illustrated by the sector intensity change chart (Figure 1), which can be compared to Figure 2. In Figure 1, the sector energy intensity indices are based to 1985.

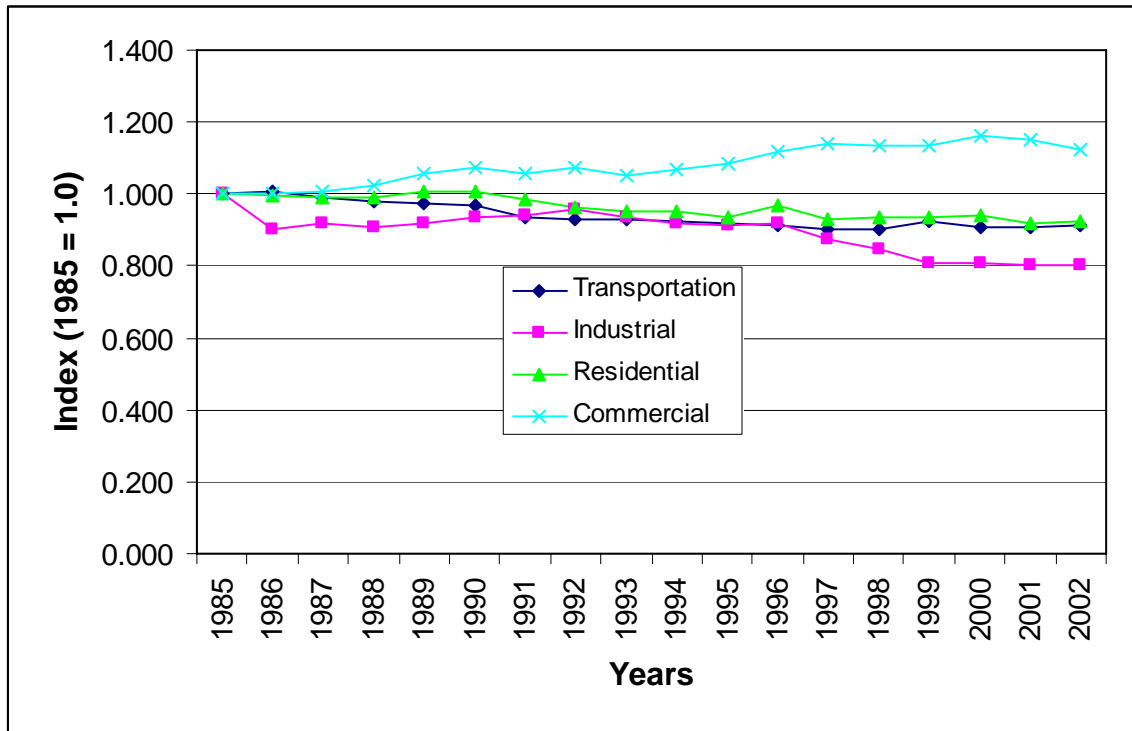


Figure 1. Indicators of Energy Intensity for Four End Use Sectors– Total (Based to 1985)

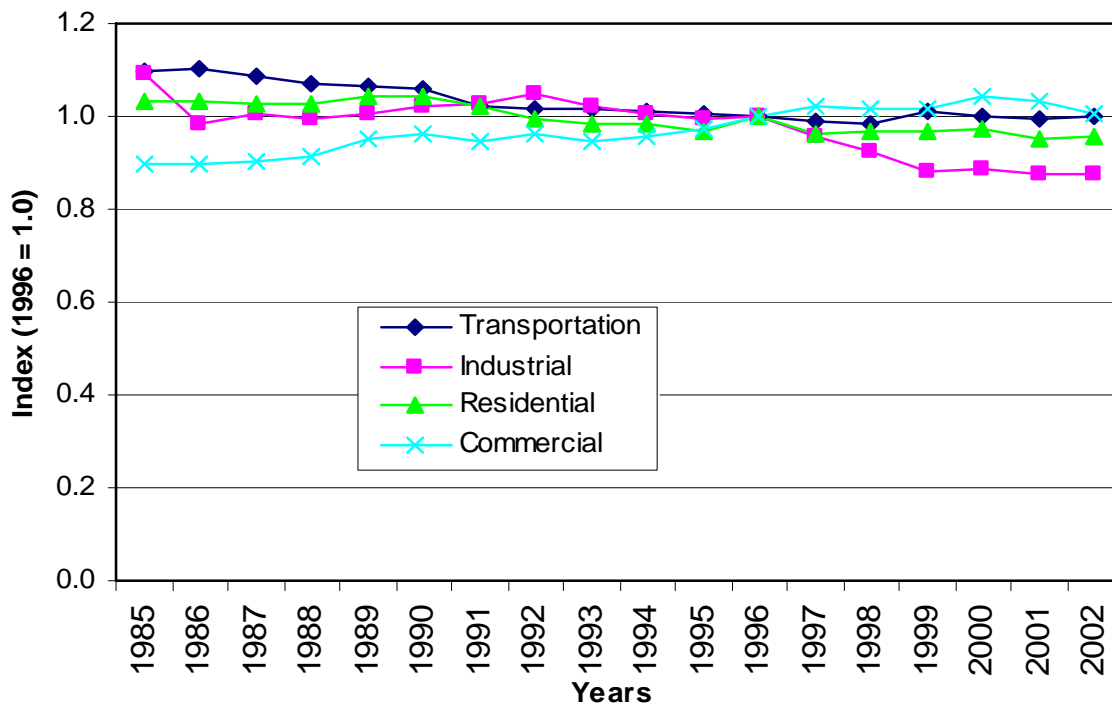


Figure 2. Indicators of Energy Intensity for Four End Use Sectors– Total (rebased to 1996)

In Figure 2, the sector energy intensity indexes are rebased to 1996. The rebasing is accomplished by simply dividing the index numbers for each series in Figure 1 by its 1996 value. The resulting indexes thus show the same changes over any specific time period as those based to 1985. However, rebasing offers the advantage of making it convenient to compare the changes across sectors from a different year. For example, Figure 1 readily shows that relative to 1985 the commercial intensity increased by about 12 percent and the transportation intensity declined by 20% though 2002. However, if one is interested in the changes since 1996, it is easy to see in Figure 2 that between 1996 and 2002 these two end-use sectors have both shown very little change. As mentioned at the outset, the intensity indexes on the website use a common 1985 base year. However, with the downloadable spreadsheets available for each end-use sector and the economy as a whole, the user has the ability to select any particular base year for the intensity indexes.