

The estimates of methane reductions are comprehensive for coal, but they do not include methane emissions associated with production, transmission, and distribution of natural gas. The bulk of methane emissions from natural gas occur during those steps rather than during end use, and inclusion of reductions in those emissions as well would multiply the estimates in Table 7.6 by a factor of 135.

In order to have a single yardstick by which reductions in greenhouse gas emissions can be compared, emissions of carbon and methane are often reported in terms of CO₂ equivalents. The CO₂ resulting from the emission of elemental carbon is calculated by multiplying units of carbon by 3.67, the proportional difference in molecular weights. The factor for converting methane into CO₂ equivalents is 35, since methane has 35 times the warming potential of CO₂.

Table 7.8 Reductions in Emissions of CO₂ Equivalents from Carbon and Methane

Component	Metric Tons	Factor Converting to CO₂ Equivalents	Metric Tons of CO₂ Equivalent
Carbon	921,200	3.67	3,380,804
Methane	18.2	35	637
Total	--	--	3,381,441

Through 1992, the three ERIP technologies reduced carbon emissions by an estimated 921,200 metric tons, and methane emissions by an estimated 18.2 metric tons. This results in a total reduction of the equivalent of approximately 3.4 million tons of CO₂.