

*HUMAN CAUSES OF GLOBAL CHANGE / 51*

house gases that gives the approximate contribution of major classes of human activity to climate change. Figure 3-1, one of the possible tree diagrams incorporating this information, identifies the human activities that call for finer-grained analysis on the basis of their impact. The more detailed, U.S.-centered accounting in Table 3-4 shows why much more detailed analysis is warranted for explaining the purchase and use of automobiles and light trucks with different levels of energy efficiency (per-

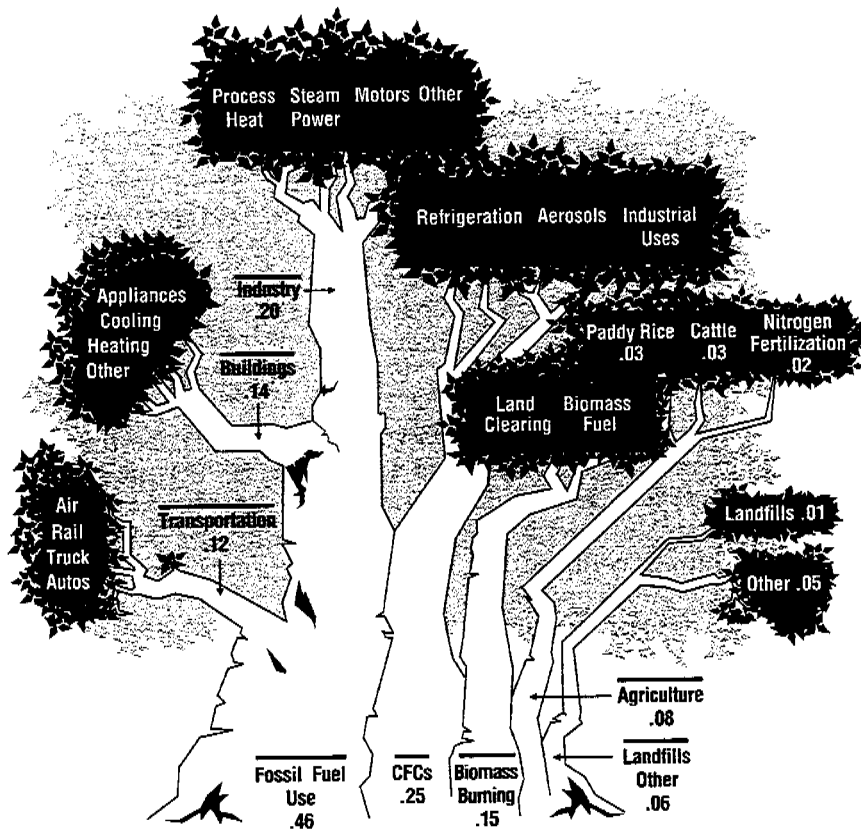


FIGURE 3-1 A tree-structured representation of relative contributions of human activities in the late 1980s to greenhouse warming. Note: Thicknesses of limbs and branches are proportional, where numbers are provided, to the contribution of the activity named. Where numbers are not provided, worldwide data were not available for further disaggregation. Even where numbers are provided, they are subject to varying degrees of uncertainty, as noted in the text. Sources: Table 3-5, except for the disaggregation of fossil fuel use into economic sectors, which was calculated from U.S. Office of Technology Assessment, 1991, Table 9-1 and Figure 9-2.