

# **Our lifestyles, climate change, and social equity in Japan from the viewpoint of industrial ecology**

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Climate change is recognized as the most urgent environmental concern in the world, and is a major reason for our commitment to sustainable development. Global warming caused by anthropogenic greenhouse gases (GHG) triggers increases in global temperature. Environmental loads as such as GHG emissions associated with economic activities can be regarded as attributable to satisfaction in terms of final human “consumption.” From this perspective, the development of “consumption-based accounting”, a tool to quantify the direct and indirect environmental load associated with the production of energy, goods, and services related to final consumption has been the subject of much debate. In addition, the importance of the contribution of households to the consumption-based environmental loads (i.e. GHG emissions) of a nation is considered important, particularly for industrialized nations as Japan.

Against this background, I will visually demonstrate the connections between our lifestyle (household consumption) and climate change with a focus on GHG emissions and critical resource consumption. Further, future perspectives of research based on energy and social equity from the viewpoint of industrial ecology will be presented.