

Energy-intensity of domestic consumption activities: using time use survey data in a decomposition model

Mikko Jalas, Visiting Scholar, Institute for Advanced Studies on Science, Technology and Society,
mikko.jalas@sts.tugraz.at

Jouni Juntunen, Aalto University School of Economics

Time use surveys are representative quantitative surveys of the time use of individuals and national populations repeated in regular, currently 10-year, intervals. Household economists have been most keen to use this data. On a conceptual level, notions such as 'goods intensity of household activities', 'labour intensity of household activities', and also 'energy intensity of household activities' have been derived. In this paper we deliver a broad picture of changes in time use and perform a decomposition analysis of the changes in the embedded and direct energy consumption of Finnish household starting from 1978 to 2009. Relevant question include whether increases in total energy consumption are due to a changes in activity patterns or in the energy intensity of activities [MJ/h]. Based on such an analysis, critical questions can be levied: How does capitalist push for increased production and consumption fit into everyday life? How do people manage or come to consume all the outputs of industrial production? On the other hand, how could the initiatives on sustainable living make use of low-intensity activities? What is the scope and potential effect of popular slow-ideologies?