Energy and Carbon Embodied in International Trade of Iran

Topic: International trade 1
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All goods and services which exported or imported in an economy, utilize energy directly and indirectly and consequently, associated with CO2 emission, according to usage type of fuel. The aim of this study is quantifies the energy and CO2 emission embodied in international trade flow in Iran. This paper applied input-output technique and build a 65-sector hybrid energy input-output table based on the subsectoral level of energy and detailed traded items, which comprise nine energy sectors, finally decomposition analysis employed to analyze emissions. Total amount of supply primary energy is 1551.51 mtoe and final energy demand is 1042.01 mtoe in the year 2010. Primary energy supply intensity is 3.04 mtoe per million Rial, and final energy demand intensity is 2.04 mtoe per million Rial in the year 2010, and total amount of CO2 emission, which produced by domestic consumption is 538.5 million tons in the year 2010.

Keywords:hybrid energy input-output table, emission, decomposition analysis