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**ENERGY, LABOR AND CAPITAL ELASTICITIES IN ECONOMY OF
IRAN – ESTIMATION OF PRODUCTION FUNCTION
(STATISTICAL ANALYSIS AND ECONOMETRIC MODEL)**

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At first in this paper we analysis energy intensity and efficiency in economy of Iran for 1967 up to 2002 (1346-1381, Iranian year). Statistical analysis show that energy intensity in period of 1967-2002 has increased but in this period rate of energy intensity (ratio of growth of energy consumption to growth of GDP) has decreased. For the same period, estimation results of CD production function with two factors (capital and labor) show the coefficient of capital factor includes two effect one for capital and other for energy. Different tests show when energy consumption is added to production function, share of capital (capital coefficient) will be broken and a part of its share involve to energy input. Estimation of capital elasticity in CD production function with two factors is about 0.65 and when energy is added to production function share of capital will decrease to 0.4 and energy elasticity will be computed about 0.2. Share of labor in two cases is constant and equal of 0.31.