TITLE: MITIGATING CO2 EMISSIONS OF RURAL HOUSEHOLDS IN INDIA: INPUT-OUTPUT ANALYSIS OF LABL(LIGHTING A BILLION LIVES)

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ABSTRACT:

We developed input-output tables for environmental analysis (EIO) of Indian for the year of 2003/04. The EIO is used to analyze alternative scenarios on the future technologies, households' life styles. Over 1.6 billion people in the world lack access to electricity; roughly 25% are in India alone. The Energy and Resources Institute (TERI), with its vision to work for global sustainable development and its commitment towards creating innovative solutions for a better tomorrow, has undertaken an initiative of 'Lighting a Billion Lives' (LaBL) through the use of solar lighting devices. LaBL aims to bring light into the lives of one billion rural people by replacing the kerosene and paraffin lanterns with solar lighting devices. This will mitigate CO2 emissions of rural households; facilitate education of children; provide better illumination and kerosene-smoke-free indoor environment for women to do household chores; and provide opportunities for livelihoods both at the individual level and at village level. In this paper we evaluate lifetime CO2 emissions of the LaBL's solar lanterns by comparing with a case where the rural households continue to use the traditional kerosene and paraffin lanterns within input-output framework using the India's EIO.