SUSTAINABLE PARAMETERS IN DISSEMINATING RENEWABLE ENERGY TECHNOLOGY

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SUMMARY: Since several years ago the author had proposed a concept of the E^{3i} village, in which locally available renewable energy sources can be transformed to supply the mechanical, thermal, and electrical energy for the house hold, SMEs and cooperative as well for the transportation sector in the rural areas. Such an idea could be immediately implemented knowing the fact that many research results achieved by various research institutions including the universities are beginning to show their results for industrial applications. It needs an integrated approach and holistic energy planning, however, in order to make the introduced technology pay to promote sustainable development, particularly in the rural areas. As the first step toward the realization of the E3i village concept, renewable energy technology is applied to provide the required thermal, electrical and mechanical energy for house hold and for value added activities. The paper describes the applicability of the proposed methodology to measure the effectiveness and sustainability of the introduced renewable energy technologies in rural areas.

Keywords: rural development, energy village, Small Processing Unit, sustainability parameters.