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Hands-on Learning on Renewable Energy – a Proposed Approach for Technology Dissemination

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Abstract. Indonesia suffers fossils-energy resources depletion as similar fate is experienced by other-previously oil producer countries. Since no domestic conventional energy sources were discovered, the energy situation is dire that leads to dependency on imported oil and gas. Building elementary students' awareness of renewable energy, however, may not be as simple as offering the sophisticated knowledge to adults. This paper assesses the potential contribution of hands-on learning to the understanding of elementary school students in Indonesia on renewable energy. The analysis considers the Bloom's aspects of learning domain namely cognitive, affective and psychomotor as the starting points. A granular view on the subject was expected to set the light on the viability of the development of approaches to renewable energy dissemination.

Keywords. hands-on learning, renewable energy, education, primary school students

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Classification of Coastal and Inland Batik Using GLCM and Canberra Distance

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Abstract. As a form of preservation of one of the Indonesian culture results, this study discusses the predictions of traditional motifs. With the case study is the Coastal Batik and Batik interior. The diversity of motifs from traditional fabrics in Indonesia began to erode due to the influx of foreign culture so that the authenticity of the traditional motifs of an area is not synonymous with the region of origin. So many traditional Indonesian motifs makes difficult to recognize the original motive of a particular area. It became the goal in conducting this study. Traditional motifs (Coastal Batik and Inland Batik) into data to be predicted using the method of Content-Based Image Retrieval (CBIR). With the implementation of feature extraction Gray Level Co-Occurrence Matrices (GLCM) with a classification method using CBIR to calculate Canberra Distance to obtain the level of accuracy of the classification results.

Keywords. Batik hinterland , Coastal Batik , GLCM, Canberra distance, CBIR