## The title of the paper

"Efficacy of eco-efficiency on evaluation for environmental policy"

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### **Abstract**

Recently, firm has been required to behave more environmentally according as people are greater conscious of environmental problem. Under such conditions, firm has used the index of eco-efficiency as one important element in environment management.

Eco-efficiency expresses the efficiency with which ecological resources are used to meet human needs. It can be considered as a ratio of an output which is the value of products and services produced by a firm divided by an input which is the sum of environmental pressures generated by the firm. Then, the firm evaluates the result which took place from various management activities by using this index. Also administrative authorities have used this index to evaluate effectiveness of environmental policy.

However, there is need of carefulness when we evaluate the policy using this index. Increase of eco-efficiency means better improvements of both environmental and economic efficiency, if the output increases and the input decreases. However, in case of increase of both output and input; besides, the increase of output is greater than that of input, eco-efficiency increases though economic efficiency gets better and environmental efficiency gets worse. This is a dilemma with respect to eco-efficiency.

Therefore the purpose of this paper is to construct a theoretical model relevant to eco-efficiency and clear problems using eco-efficiency as evaluation of the environmental policy.