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JARUWAN POJEANG : THE COMPARATIVE ECONOMIC ASPECT BETWEEN HYBRID ELECTRIC
 BOATS AND LONG TAIL DIESEL ENGINE BOATS FOR TRANSPORTATION CASE STUDY
 PHADUNGKRUNGKASEM CANAL. THESIS ADVISOR : DEBHANOM MUANGMAN , M.P.H.,Dr.P.H.,
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The long tail diesel engine boats for transportation play an important role in reducing traffic problems but they create noise and air pollution. The new design and development of hybrid electric boats has been offered as a solution for the pollution impact. Hybrid electric boats have been built and developed by the National Electronics and Computer Technology Center (NECTEC) which is supported by Bangkok Metropolitan Administration (MBA).

This study was undertaken with the primary purpose of analysis and assessment of hybrid electric boats compared to long tail diesel engine boats for transportation.

An analysis investment of long tail diesel engine boats show that Net Present Value (NPV) is 10,164,725 baht , Benefit/cost Ratio equal to 1.4 and Internal Rate of Return (IRR) equal to 33 % and investment of Hybrid electric boats show that Net Present Value (NPV) equal to 6,806,508 baht, Benefit /cost Ratio is 1.23 and Internal Rate of Return (IRR) is 24 % and Investment of long tail diesel engine boats which used the accessories for decreasing noise pollution show that Net Present Value (NPV) is 9,870,815 baht, Benefit/cost Ratio is 1.38 and Internal Rate of Return (IRR) equal to 33 %.