

Chanasiri Vanit 2006: Transaction Cost of Certified Emission Reductions (CERs) under Kyoto Protocol and Its Effect on Biogas Production of Small Hog Farms in Thailand.

Master of Economics (Business Economics), Major Field: Business Economics, College of Graduate Studies. Thesis Advisor: Assistant Professor Supachat Sukharomana, Ph.D. 152 pages.

ISBN 974-16-2318-6

The objectives of this study were to assess the concept and procedure in calculating transaction cost in preparing Certified Emission Reduction (CERs) for small Clean Development Mechanism: CDM project in Thailand and to assess the financial cost and benefit that affect from selling carbon credit by using a case study of bio-gas production from swine waste. Both primary and secondary data were collected for studying.

The study showed that the transaction cost of Certified Emission Reduction (CERs) comprises of (a) the cost that bears by the parties who want to buy carbon credit (b) the cost of the government or public office that participate in carbon credit trading and (c) the cost that bear by the one who wants to sell carbon credit. It was estimated that the cost in certifying emission reductions was \$US 117,000-128,000 for each project in the first year and \$US 14,000 for the following years. This cost usually pays by the one that want to sell carbon credit. The other cost components are not yet studied.

By using this amount of money as an initial investment cost to invest in selling carbon credit, to sell carbon credit of 14,725 tons/year of biogas project can generate additional revenue 2,085,060 baht/year for the period of ten years. The annual operating cost in transaction carbon credit each year is 540,000 baht. At discount rate of 12 percent, the net PVB is 4,290,000s baht/year and it yields internal rate of return at 12.92 percent. The cash flow is better than the cash flow without selling carbon credit. Government therefore should establish carbon credit market as soon as possible.

Chanasiri Vanit

Student's signature

Supachat Sukharomana 27, 05, 2006

Thesis Advisor's signature