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# Assessing ecological footprints of products from the rubber industry and palm oil mills in Thailand

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### Abstract

Rubber and crude palm oil (CPO) are the major agricultural products of Thailand. This work aimed at evaluating the ecological footprint (EF) of ribbed smoked sheet (RSS) from cooperative rubber sheet factories, ribbed smoked sheet bale (RSSB) from large rubber sheet factories, Standard Thai Rubber (STR) from block rubber factories, concentrated latex from concentrated latex factories, and CPO of palm oil mills in Thailand. The system boundary of cradle to gate was set according to the life cycle assessment approach. The fresh latex and cup lump from rubber plantations and fresh fruit bunch from the oil palm plantations were the major inputs for the rubber factory and the palm oil mill, respectively. EFs of the selected products from high to low were STR 20 at 7.06 global hectares (gha)/tonne, RSSB at 6.87 gha/tonne, RSS at 6.78 gha/tonne, STR 5 at 6.68 gha/tonne, concentrated latex at 5.07 gha/tonne, and CPO at 4.34 gha/tonne, on average. The EF of forest for production of fresh latex, cup lump and

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