

Energy Development in East Kalimantan, Indonesia

Yasunori Ohashi¹, Rudianto Amirta², Takashi Watanabe¹

¹Research Institute for Sustainable Humanosphere, Kyoto Univ. ,

²Faculty of Forestry, Mulawarman Univ.

East Kalimantan in Indonesia is a huge provider of coal, oil and natural gas, but production of oil in this region is gradually decreasing and expected to be depleted in the next few decades. Therefore Indonesian government stated that production of coal is the major target for energy supply in this country. However, strip mining of coal causes serious and extensive environmental destruction in the forest area. The forest destruction exposes dry coal surfaces and causes fire accidents. The consumption of coal increases carbon dioxide concentration in the atmosphere at higher speed than oil, accelerating the global warming. In energy industry in East Kalimantan, it has also been pointed out that the economical profit from coal and oil production is shared with big companies and central government. Much less benefit is distributed to the local people and economy. The Indonesian and local government promotes to reforest or to make plantation of *Acacia mangium*, *Paraserianthes falcataria*, *Elaeis* sp. (oil palm) and many kinds of fruit trees. Especially, plantation of oil palm and fruit trees has been extensively developed in a large scale in this region. *Jatropha curcas* is attractive for biodiesel production and planted at Kutai, Berau and other districts in East Kalimantan. However, the scale of plantation in East Kalimantan is still much smaller than those found in Java Island. Production of bioethanol from wood and other lignocellulosics are not commercialized in this district, but it is one of the potential targets to replace the coal mining in East Kalimantan. Actually the local people hope that the wood resources should be utilized for various purposes not only for wood and pulp supply but also for the biofuel production. In the biofuel industry, it is the most important to secure the natural environment and to activate local economy.