

Kalimantan Rail Project - Pre-feasibility Study



The Kalimantan Rail Project is a major infrastructure project which will involve 700 km of rail line to streamline P.T. Adaro's coal handling facilities. This pre-feasibility study sets out the overall conceptual layout, operation philosophy, and economic feasibility of the plan.

Client:
P.T. Adaro Indonesia

Location:
South Kalimantan,
Indonesia

Market:
Transportation

Services:
Pre-feasibility study
and operations
modelling

Value:
\$US1.4 billion

Completion:
May 1995

P.T. Adaro Indonesia operates two coal mines in the northern part of South Kalimantan. At the time of the study, coal was transported by road to a barge loading facility on the Barito River. It would then be delivered 200 km down river either to a transhipment point in the Java Sea for loading onto cape size vessels, or to Pulau Laut Coal Terminal for handy and panamax vessels.

The purpose of this pre-feasibility study was to determine the capital cost of a rail track, rolling stock and infrastructure to haul 20 million tonnes per annum of coal from Adaro's mines to Pulau Laut Coal Terminal or a barge loading facility on the east coast such as Adang Bay, to streamline the transportation process.

The pre-feasibility study included the following elements:

- Location of a suitable route from topographic maps and digitising the map data of the route
- Determination of track construction requirements and estimation of costs
- Modelling of train operation to carry 20 Mtpa of coal
- Assessment of rolling stock and infrastructure requirements and associated costs
- Comprehensive report to P.T. Adaro of all aspects of the train operation and capital costs

The study included detailed confirmation of the route by helicopter following the preliminary alignment determined from the topographic maps. The final report presented a route location within a narrow corridor and a comprehensive estimate of all capital costs.

