

From the Editor

The Law Number 4 Year 2009 hammers firmly that all mining operations in this country must be applied by implementing good mining practices, because devastated environments due to these mining operations occur in all part of the country. The government has great concern for these conditions. Mining enterprises that neglect an environmentally friendly mining are terminated their mining licenses, and they must pay cost of the degraded environment. Illegal mining, particularly for gold, needs to be handled wisely by the government, because this mining is carried out by artisanal gold miners that have no enough skill and they always use dangerous materials like mercury for their activities. Moreover, they mine the gold in the area belonging to mining enterprises. This causes conflict between them and the enterprises. In order to solve this problem, the law has allocated an area for the artisanal activities called 'mining area for people'. This solution is successful and has implemented in adjacent area surrounding the legal mining operation. This also has improved quality of their daily living and the conflict eases drastically. Besides this environmental issue, the significant point of the law is to improve value added of mineral and coal. Prior to implementing this law, all mineral and coal are exported as raw materials and this has caused loss of profit for the country revenue. To overcome this problem, the government provides an obligation of making smelter for mineral processing. Therefore, prior to exporting this mineral, it must be processed to obtain its value added.

Papers presenting in this current journal relate to the above issues. The main point of papers tries to overcome the environmental issues, to improve value added of mineral and coal, and policy implemented to apply good mining practices.

Artisanal and small-scale mining of gold in West Lombok is illegally carried out. This mining is one of the examples of the mining operation in this country retaining the issue root of social, economic and cultural community. According to the policy of regional spatial plan, the gold potential should be partly allocated for the artisanal and small-scale mining as stated by the mining law. This mining requires guidance, education and training in either capital aspect, business or mining technique. Therefore, the role of the regional government is absolutely required.

Bentonite, a commodity for industrial application, is needed in a large number of quantities. This country has a lot of this resources, but unfortunately, its quality does not yet satisfy industrial specification. Accordingly, it is necessary to activate the material to enhance its quality. This research was aimed to obtain the optimal bleaching power to decolourize the crude palm oil effectively.

The example of case study of the energy and mining company has a positive impact to the regional economy in terms of the community development and economic productivity. In overall, it indicates that the energy and mineral resources sector could be used as one of among the catalysts to achieve interregional convergence through 'cross fertilization' toward the national gross domestic product per capita index. All in one purpose is to set up of creating job and income toward a welfare society.

The threat of global warming should be addressed by increasing energy efficiency and reducing energy consumption, since the green house gas mainly comes from combustion of fossil fuel in energy sector. Unfortunately, the conventional energy efficiency indicator in the national level such as energy consumption per capita, energy intensity and energy elasticity frequently shows a contradictory result. The objective of this study is to develop a new energy efficiency indicator using both gross domestic product and energy consumption per capita as parameters. The best practice correlation between energy consumption per capita and gross domestic product per capita was also used to evaluate energy projection of Indonesia. The study concludes that the Indonesia energy projection developed by the International Energy Agency is the most realistic, efficient and achievable.

The selected coal samples of different moisture contents obtained from the various coalfields were used to study spontaneous combustion characteristics by differential thermal analysis (DTA) and crossing point temperature (CPT). Results indicate that there is no direct correlation between the spontaneous combustion test data and the individual properties of the coal samples by both DTA and CPT test methods. A preliminary conclusion can be drawn on the coal moisture content effect on spontaneous combustion. Higher moisture content coals are more susceptible to spontaneous combustion than that of lower moisture content coals. It also can be stated that the susceptibility of coal to spontaneous combustion is basically a complex. Clearly more tests are required to investigate the effect of coal properties in more detail from other Indonesian coals that have various types and ranks.

After reading all the above papers, it is really expected that the mining issues in this country could be solved properly in terms of environment, value added, economy and policy. It could be successful by applying the good mining practices supported by the law and related supporting policies. This needs synergy among the stakeholders to build a prosperous future in the mining sector.

The Editor