

Strategic resource partnership provides for a win-win situation

The re-emergence of coal as a viable source of energy is good news for Indonesia

In May 2011 Germany announced that it would phase out nuclear power production entirely by 2022. Currently the world's fourth largest consumer of coal with approximately 50 percent of its electricity consumption coming from bituminous coal and lignite, Germany's immediate solution has been to increase its coal-fired electricity production – with the ultimate objective being to fill the nuclear gap with a reliable supply of energy from renewable sources.

There are 17 known rare earth elements (REEs) that are crucial ingredients in the manufacturing of wind turbines, solar panels, electric car batteries and energy-efficient light bulbs. In March of this year, the Obama Administration announced the filing of a World Trade Organization case against China, citing unfair trade practices in rare earths of which they produce approximately 97 percent of global supply. The German government thus signed intergovernmental "strategic partnership" agreements with Mongolia (October 2011) and Kazakhstan (February 2012) in the fields of raw materials, industry and technology to mitigate the impact of China's REE monopoly on the development of renewable energy technologies in Germany.

Regarding Indonesia, Dr. Lars Schernikau – co-founder, shareholder and supervisory board member of Ichor Coal NV in Germany and of its subsidiary PT HMS Bergbau Indonesia – argues that while Indonesia must move on from the large-scale use of oil for electricity generation, renewable energy initiatives are far from ready for significant reliance upon them.

"Coal is therefore going to re-

emerge and be the main source of electricity, especially in the Asian region for at least the next 50 years," explained Dr. Schernikau – an argument expanded upon in his book *The Renaissance of Steam Coal* (Springer 2010). Indonesia serves as the world's fifth largest producer of coal and the largest exporter, with 371 million tons produced in 2011 of which 289 million tons were exported.

The Indonesian government launched a 10,000 MW steam coal-powered electricity generation program in June 2006 in anticipation of the inevitable domestic and regional increase in energy demand. President Director of state-owned electricity company PT PLN Nur Pamudji expressed that "this year will mark the point where 50 percent of our electricity is generated from coal."

However, Dr. Schernikau points out that "of the world's total cumulative energy investments between 2001 and 2030, coal will receive only about 5 percent relative to oil and gas." This is applicable to Indonesia, which has maintained a historic government subsidy on oil to the quite obvious detriment of the sub-sectors of coal, natural gas and renewable energy resources; of which Indonesia possesses immense potential.

Subsequently, "Indonesia received 65.5 trillion rupiah in state revenue from coal compared with 177.31 trillion rupiah from oil; despite the fact that Indonesia exported 361 thousand barrels of oil per day (MBOPD) in 2011 compared with 2400 MBOPD of coal," according to Prof. Widjajono Partowidagdo, the late deputy minister for energy and mineral resources.



"Coal is going to re-emerge and be the main source of electricity."

Dr Lars Schernikau, Co-founder, Shareholder and Supervisory Board Member of PT HMS Bergbau Indonesia



"Strategic partnership between our two nations would support educational exchanges."

Dr Ilham Habibie, President Director of Ilthabi Rekatama



"Indonesia exported 361,000 barrels of oil per day in 2011, compared with 2,400 of coal."

Prof Widjajono Partowidagdo, the late Vice-Minister for Energy and Mineral Resources

contribute to the German government's efforts to support national firms in gaining access to the raw materials necessary to meet industrial production demand. The agreement with Kazakhstan encompasses all phases: from



feasibility studies, to asset acquisition, to the use and export rights of end products.

"Such a strategic partnership between our two nations would support educational exchange in the field of energy and natural resources, as well as the transfer of much needed technology from

Germany to Indonesia," said Ilham Habibie.

Germany is a global technology leader in the fields of power generation and mining equipment, and technologies such as Flue Gas Desulphurisation (FGD), Carbon Capture and Storage (CCS) and Coal-to-Liquid (CTL) would all arguably be well received in Indonesia. An inter-governmental strategic partnership agreement would lead to a stronger relationship between Indonesia and Germany's private sectors.

Dr. Schernikau pleads that Germany should dispel the negative connotations of coal, proclaiming that "Germany must stop fighting coal, and instead work with coal" to minimize its environmental impact. Berlin-based Ichor Coal and its Indonesian subsidiary PT HMS Bergbau Indonesia wishes to support Indonesia in maximising the benefits of its coal reserves.

"We are ready to invest here; we are ready to bring German technology here for more efficient production. If required we will also invest in the necessary infrastructure, which may include access roads, conveyor belt systems, ports and so on."

A resource cooperation agreement between Germany and Indonesia would not only reduce investment risks and as a result make investments cheaper for Indonesia, but also bolster the exchange of knowledge. With the long-term support of industry leaders such as Ichor Coal and HMS, Indonesia could significantly increase the energy security its coal reserves ensure as well as the state revenue they provide, while simultaneously reducing their environmental impact.

