

## Report on the Regional Forum on Sustainable Energy – 11 April 2005

Reported by : Ir. Mah Soo

The Institute for Environment and Development (LESTARI) of Universiti Kebangsaan Malaysia (UKM) recently held a regional forum on the 11 April 2005. The forum focused on sustainable energy, with the headline “Meeting the Challenges for Sustainability in Energy Development and Utilisation”. The event was officiated by YB Dato’ Sri Dr. Lim Keng Yaik, Minister of Energy, Water and Communications, Malaysia.

The main keynote speech was presented by Y. Bhg. Tan Sri Datuk Amar Leo Moggie, Chairman of Tenaga Nasional Berhad (TNB) and it was entitled “Sustainable Development in the Power Sector in Malaysia”.

In his speech, Y. Bhg. Tan Sri Datuk Amar Leo Moggie highlighted two critical issues faced by our energy consortium; that of sustainable energy development and sustainable growth of energy companies in the power sector.

“Last year’s tsunami and the subsequent earthquakes have forced the global community, more than ever before, to come to terms with the true wrath and force of nature and the importance of striking a balance between development and the environment.

For long, changes in energy development have been driven by resource availability, prices and developments in technology. Today, consistent with the goal of sustainable development, the transition to a sustainable energy system is also increasingly marked by the importance we give to the environment and social concerns through actions related to energy.”

The speaker goes on to state that “At times, however, we in Malaysia have been guilty of taking our beautiful, clean and pristine green environment for granted. As the recent spate of news on environmental violations goes to prove, more and more, pressures for development have resulted in the collision of priorities between the needs and interests of what is seen as “development” and those of nature and



the environment.” and he cited the increase of public interest in the environment and that environmental impact assessment is a necessary part of projects and steps has to be taken to minimise and mitigate the effects on the environment and the surrounding areas.

### SUSTAINABILITY IN ENERGY DEVELOPMENT

Y. Bhg. Tan Sri Datuk Amar Leo Moggie emphasised “Energy is always an important issue in today’s world, not only because of its implications for economic growth and development but also because we are concerned with our declining natural resources. For too long, we have been too reliant on fossil fuels for our energy resources that we lost sight, albeit temporarily, of the need for resources to be sustained for generations to come.

Every sector in the economy has its fair share of sustainable development issues. A sustainable energy future, according to the UNDP, is an important linkage for sustainable development and brings considerable benefits in social, environmental, economic and security terms.”

The speaker talked about the evolution towards the four fuel strategy to the recent inclusion of renewable

energy as the fifth fuel. Examples of some of the developments in the renewable energy sector in Malaysia and that around the world were discussed with examples of wind, solar and biomass projects that were conducted in Malaysia. He cited that the slow progress in this sector is due to the cost differential between the cost of generation of electricity from the other different fuels.

### Hydro Potential

The speaker introduced hydropower as a green energy, which is perhaps the only conventional large energy system that is renewable and sustainable. He cited that a lot of this potential resource is underdeveloped because of its location. In Malaysia, specifically in Sarawak, the Rajang river basin including Bakun, Muruni, Baleh and Pelagus, which boasts of a huge hydropower potential, reportedly at approximately 20,000 MW.

In the context of ASEAN, three countries share the Mekong river basin, which is known to have huge hydropower potential.

Within this scenario, hydropower should attract renewed interests and its potential deserves another re-look for long-term diversification of the country’s generation capacity.

### SUSTAINABLE GROWTH OF COMPANIES

The speaker then touched on sustainability of companies in the power sector. He gave some comparative data as follows:

"A look at some comparative figures on return on capital employed of different utilities versus their corresponding electricity growth rates show that in 2003-2004, TNB's return on capital employed was 3.6% compared to 12.5% for EGAT in Thailand, 5% for KEPCO in Korea, 8.5% for Singapore Power and 14.9% for China Light and Power.

The corresponding growth in electricity demand was 8% p.a. for Malaysia, 9.2% for Thailand, 5.7% for S. Korea, 2.4% for Singapore and 4.3% for Hong Kong. As can be noted, even though the demand growth for S. Korea, Singapore and Hong Kong were lower than Malaysia, the returns to these utilities were all higher than TNB's.

Utilities can only provide the quality of service modern consumers expect if they earn a fair returns to allow for continuous investment in capacity building and upgrading of existing networks."

Finally, the speaker concluded after having covered a wide area of issues relating to sustainable energy development, from traditional fuels to renewable energy and to the relevance of sustainable company growth. He then warned that the time for renewable energy has arrived as oil, coal and natural gas prices in the long term would continue to escalate, while renewable energy costs should come down, and there will be a time when all the prices would converge and all forms of energy would compete on a level playing field.

He also highlighted the challenges faced by a utility as a commercial entity with a going concern in the issue of sustainability. He then cited TNB as an example "which has for long strived to cope with trying to sustain and meet electricity demand growth, despite the declining rates of return from the 8% required by World Bank before privatisation, to less than 4% today.

Many nations, we we know, have been experimenting with the competitive model in the hope of letting market forces determine the price of electricity and to weed out the weak and inefficient industry players. Despite the early enthusiasm that accompanied such a model in the late 80's and early 90's, success of the model has been evasive so far and has created instability in the supply system even for countries where demand growth has stabilised."

The speaker concluded on the note that TNB has a central role in the power sector and that "when TNB sneezes, the electricity industry in the country would catch a cold" and that it is essential to ensure the continued sustainability of the national utility (TNB) as a prerequisite to sustainable development in the power sector." ■

*Y. Bhg. Datuk Amar Leo Moggie was recently conferred the title of 'Tan Sri' by the Yang di-Pertuan Agong Tuanku Syed Sirajuddin Syed Putra Jamalullail.*

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