



Geoterrain Nigeria Limited

ENHANCING GEOSCIENCE EDUCATION TO MEET FUTURE ENERGY NEEDS

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Energy is vital to the systematic operation of our daily lives while achieving set development and growth plans. Over the coming decades, more people will gain access to energy and enjoy higher standards of living. With world energy consumption growing by over 1.8% yearly, these developments, on the other hand, could place greater pressure on our world's resources, such as non-renewable and renewable energy, i.e. fossil fuel, and water, wind, sun respectively including food. At the same time, climate change and other environmental and social issues will continue to remain a serious concern. In essence, today's challenge is to effectively manage the resources while meeting future growing worldwide demand for secure and affordable energy sources.

Though, world oil markets remain adequately supplied, high oil prices do reflect increasingly uncertain conditions. Many OPEC member countries and nonmember countries alike, are concerned about oil and gas costs and their relative security. Therefore, searching for cost effective and efficient ways to improve capability to handle market volatility and capacity to mitigate against possible supply disruptions in the future will be a focus. Geoscience, a key performance indicator, has become more interdisciplinary, multidisciplinary and trans disciplinary subject. As such, the need for students to acquire adequate knowledge, skill and mastery (i.e. strength) in their discipline, as well as the ability to work across disciplinary boundaries will play a major key role in more global future opportunities. Consequently, our science has become increasingly important, in addressing societally important issues (natural hazards, water, energy, climate, sustainability, etc.). This makes preparation, in political understanding, integrated environmental and global economics approach and effective communication, more important skills for our undergraduate/graduate students and young professionals alike to learn.

Yet, in our society, Nigeria, the importance of understanding the dynamics of Earth's history and evolution – Geoscience and associated subjects, are being underscored through inadequate funding, poor supporting infrastructure, student lecturer's ratio, relevance of field work in our University and Polytechnics including Industry-University partnership etc. Consequently, the potential value-added impacts on end users, i.e. Government functions, Energy Industries, Financial institution, public establishment, Professional Association/ Societies and indeed University etc are being gradually eroded.

This paper attempt to provide a workable and renewable framework that involves interdisciplinary, multidisciplinary and government-private sector partnership concept, on addressing current and future energy demand. Similarly, maintenance of high quality education in Nigeria Universities and Polytechnics, with special emphasis on opportunities to development of Young Nigeria geoscientists, into the professional world while staying in touch with their core profession will be discussed.

The main objective of this forum therefore cannot be too different from other society's objectives but more importantly tailored to fit into the Nigerian situation, in line with NAPE Constitutions and Bye-Laws as amended in 2002.