

A Role for SPE in Meeting Vital Human Needs

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Abstract

Energy has a critical role to play in assisting developing nations overcome the scourge of poverty but until recently, energy's role in development has not been understood. Wide-scale poverty, including low education levels, subsistence living and conflict cannot be overcome without moving up the Energy Ladder.

The authors use Abraham Maslow's Hierarchy of Needs to identify how societies evolve in tandem with progressively more robust energy systems. They explore why millions of people today are not yet moving up the Energy Ladder and what SPE members can do to facilitate such movement.

Roughly half of humanity lacks access to modern energy. Even where energy services exist in poor countries, erratic and unreliable power supplies significantly impede economic growth. Growing numbers of biomass-dependent poor are driving deforestation and this could worsen with the world's population growing by a quarter of a million people every 24 hours.

Africa is the continent of greatest energy needs. The health consequences of biomass-dependence there are staggering. Women and girls in particular face hardship, lost opportunity for self-improvement, and despair.

Movement up the Hierarchy of Human Needs and the Energy Ladder requires a level playing field, trained energy professionals, and effective global strategies. A number of actions that fall within the mission of SPE would create positive impact: 1) Advocating for hydrocarbons to be part of energy development strategies in developing nations, 2) Building human resource capacity in the energy sector, 3) Affirming the goal of universal access to appropriate energy and engaging in the debate over global strategies to make this a reality, and 4) Joining with others in initiatives to tackle energy poverty.

Some of the greatest needs and greatest opportunities for petroleum engineering will be in developing nations. The 50th anniversary of SPE affords an opportunity to reflect on the trajectory of the organization and take the next steps in making it a force that benefits the entire world.