Capacity Building in the Geothermal Sector in Indonesia, a Unique Collaboration

Abstract

Prior to WGC 2010 in Bali, the President of the Republic of Indonesia, issued decree No. 04/2010 in January 2010 to establish the 2nd phase fast track development program, to construct another 10,000 MW of electricity generation capacity to support the burgeoning growth of the Indonesian nation. The President specifically defined that 49% of this capacity, or 4,900 MWe, must be produced from Indonesia's vast geothermal resources, to support his commitment to move forward with programs to meet the Country's Greenhouse Gas (GHG) emissions reduction targets and reduce dependence on fossil fuels. In order to achieve such a dramatic increase in geothermal generation capacity, there was a need for a huge increase in geothermal human resources of all disciplines, but notably in geology, geophysics, and geochemistry to support the vision. Star Energy, the operator of the Wayang Windu Geothermal Power Plant in West Java, a Joint Operating Contract with Pertamina Geothermal Energy (PGE), saw an opportunity, and took the initiative to collaborate with Institut Teknologi Bandung (ITB) and the University of Southern California (USC) to create a program to build the needed geothermal educational capacity. Funding to support the program was requested in a formal submission to the United States Agency for International Development (USAID) in Indonesia, with Star Energy providing co-funding, and a two year program was commenced in January 2012. This paper is intended to share the capacity building program and its collaboration with industry and other universities throughout Indonesia, and how it has stimulated a much needed increase in geothermal specialization.