

## **JGSEE Hosted Energy Modeling Training Workshop Bangkok, Thailand, May 2008**

In May 2008, Dr. Charles Heaps of the Stockholm Environment Institute traveled to Bangkok, Thailand to lead a training workshop on SEI's LEAP software system: a tool for integrated energy and pollution planning, and climate change mitigation analysis. Dr. Heaps is the lead author of the LEAP system.



The workshop was organized and hosted by the Joint Graduate School on Energy and Environment (JGSEE) and was attended by energy planners

and a variety of organizations within Thailand including local universities, various local non Governmental Organizations, staff of the UNDP and staff of the Thailand Energy Policy and Planning Office (EPPO) and the national electric utility (EGAT).

The workshop provided a thorough introduction to the use of LEAP for energy forecasting and planning. The first day primarily consisted of lectures on energy planning and demonstrations of the LEAP system by Dr. Heaps. The following days consisted of intensive hands-on training exercises in which participants worked with LEAP to develop a series of simulated energy and environmental analyses. These included exercises on energy demand forecasting, electric sector capacity expansion and dispatch modeling, environmental emissions modeling, and transport sector stock-turnover modeling. As a result of these exercises, participants acquired a good understanding of how to apply LEAP for energy and environmental modeling in a wide range of situations.



In the final two days of the workshop, participants were shown a variety of models that have been developed for Thailand including a top-down econometric based forecasting model developed by EPPO and a comprehensive transport model developed by staff at JGSEE. During the presentation of these models, Dr. Heaps provided feedback and advice to the model developers on how they might improve their models and continue to develop them.