



CenterSES • PSEB • STTNAS

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Sekolah Tinggi Teknologi Nasional • Babarsari Yogyakarta 55281 Indonesia

Renewable Energy Technology Capacity Building Through Educational Institutions

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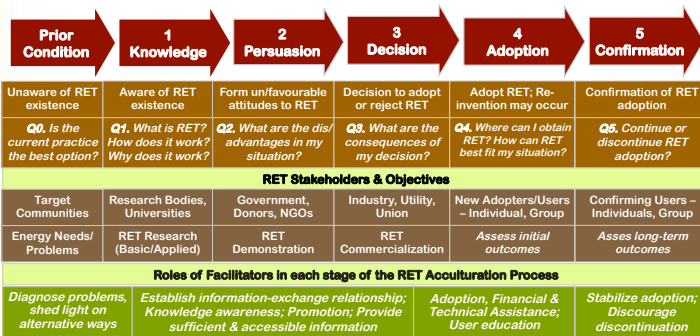
Abstract

- Engineering colleges can play an important role in providing **education in renewable energy technology** and practical experience in the design, manufacture, installation, operation and maintenance of **RET**
- **2009**: PSEB / CenterSES STTNAS was established under the STTNAS – UNSW ADRA*/AusAID collaborative research project to **foster RET education** (*University of New South Wales, Australian Development Research Award)
- **2009-2012**: In collaboration with UNSW, ADRA-AusAID, BP Solar and IPEN Pty Ltd, PSEB STTNAS undertook **RET study tours**, **field activities**, **seminars** and develop **curriculum** to provide model for RET capacity building to facilitate **RET acculturation** in Indonesia

STTNAS-UNSW/ADRA RET Capacity Building & Dissemination Activities

- Groups of STTNAS students and staff undertook study tours to **geothermal**, **photovoltaic**, **micro hydro**, **wind**, **jatropha**, **biomass** and **biogas** sites, factories and research facilities in Jakarta and the Indonesian provinces of West Java, Central Java and Yogyakarta
- Study tour participants were organised in mixed teams of Electrical, Mechanical and Civil Engineering, Chemistry and Geology to expose and explore the **interdisciplinary nature** of RET
- Outcomes were reported in seminars in which students presented their findings and on STTNAS & UNSW websites: www.ceem.unsw.edu.au/content/RenewableEnergyinIndonesia.cfm?ss=1

KPDAC Model & RET Acculturation



RET Acculturation Process

RET is acculturated if users continue to confirm its benefits

- **RET Acculturation**: The extent to which RET diffuses into & is assimilated by a community (Retnanestri 2007)
- **RET KPDAC innovation-decision process**: Potential adopters progress from gaining **Knowledge** of RET, to **forming an attitude** toward RET (**Persuasion** stage), to a **Decision** to adopt or reject RET and, if to **Adopt**, to **Confirm** or repudiate the adoption decision (adapted from Rogers 2003 in Retnanestri 2007)
- Engineering colleges play an important role in **creating RET facilitators & capable agents** for RET acculturation



Field visits to RET sites in West Java & Yogyakarta, 2009-2010

Further Work & Acknowledgements

- Continued RET **educational** & **dissemination** activities
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BPPT's Baron Techno-Park, South Yogyakarta, visited by PSEB team in May 2012

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Keywords : Renewable energy technology, capacity building, educational institutions

The Committee of EBTKE - Conex 2012 herewith certified the following abstract is complementary to the poster material presented at the EBTKE CONEX 2012



Priyandaru Effendi

Chairman of Organizing Committee INDO EBTKE CONEX 2012