

Panel Discussion Summary Report  
Asia-Pacific Regional Initiative on Energy, Environment and Ecosystems (3E) Nexus for  
Sustainable Development  
24-25<sup>th</sup> February, Hulhule Island, Male', and Maldives

Summary of each panel discussion by session-wise:

**Session 6: Energy Conservation**

Paper 1:

This paper discussed the current situation in the Laos and how demand will increase by fivefold towards 2020. It was pointed out that as the existing generators are already committed to supply power to neighbouring countries, they are expecting a deficit of generation until 2020. In order to combat this situation, the energy conservation was proposed. However no firm plans for energy conservation was presented.

Paper 2:

Energy efficiency and GHG mitigation in Bangladesh was discussed. The presentation started by outlining the current status of power generation and demand in Bangladesh. It was pointed out that as most of the power plants are natural gas based Open Cycle Gas Turbines, in which the efficiency is around 30%, much resource is wasted while producing more GHG emissions per MWh of power generation. There are also about 14 MW of captive generation and pointed out the possibility of operating them as co-generation plants. The main message of the paper was inefficient operation of their power systems and methods to overcome that.

Paper 3:

This paper is about sea transport in pacific region. As the cost of fuel is escalating and GHG emissions due to sea transport are increasing, the possibility of using wind powered and solar powered ships were described with a number of examples. Four strategies for energy efficiency in sea transport are: operation, technology, alternative fuels and renewable generation. It was pointed out that the potential of renewables for enhancing the efficiency of sea transport. Also discussed how well-being of local

community could be enhance by community based transportation solutions.

#### Paper 4:

In this presentation a real implementation of an energy conservation measure in Cambodia was described. The programme addressed the topics such as: raising awareness, building the capitol for energy efficiency measures, developing energy labels, installing CFC lamps and solar heaters and supporting carbon offset projects. Achievements of this project were satisfactory and pointed out that this can be implemented in other cities.

As general comments Chair said that two presentations on different options for energy conservation and energy efficiency were presented in this session. Another presentation discussed about an actual implementation. Even though the level of intervention was very much basic to the options presented in the previous two papers, this study demonstrated that if proper incentives are in place, it is easy to implement energy conservation and energy efficiency measures. Finally the Chair said that in order to achieve the Nexus agenda energy conservation and energy efficiency measures should be introduced into both energy and transport sector and Dr. Nutall's presentation provided some evidence for the later.

Issues raised by participants:

Prof. IJaz:

Activity Based

- Fro e.g. Rice crop is applicable for all respective countries
- Energy-cogeneration (network)
- Boats and Buildings in Bangladesh

Prof. M N Murty:

- Case study

- For e.g. urban ecosystem
- How do you measure management (gas emissions)- mitigation?
- Adaptation
- River cleaning ( addresses climate change, adaptation and mitigation)
- Material and teaching education to the students

Prof. Bajracharya:

- Development of data is very difficult
- 3E Nexus base line data is very important for initiation
- Sharing the data for participant countries
- GHG emission and Mitigation and adaptation from Bureaucrats then Academician and students.

Prof. Ekanayake:

- Guidance is very important to make a template for counterpart working in each theme.
- Need to open local level community by each country ( mechanism)

Prof. Nhuan

- Research fund, Tariff and Economy
- 3E balance is very important for economy
- Research activities
- To chose to place to improve network
- To get project aim
- Demonstrate all the project activities
- High collaboration
- 3E network Asia-Pacific

Capacity building inputs

- Workshops
- Training
- Sustainable Management for master level training
- Publication
- Database to share all the presentation files.

- Making a committee through university

Prof. Joni Hermana

- Follow our perception
- Make a clear target
- Benefits: Government, Community and Student
- CFC reduce
- Sea level rise issue for Maldives
- Try to share our knowledge through our network
- Implementation is important and lessons from Malaysian case studies.
- Norms is kind of networking

Prof. Narayanan:

Future Steps:

- Expanded to the trainer of development
- Common framework for research
- Economic activity is important for measuring energy
- Reduction energy consumption
- Sector should be included
- Knowledge, dissemination and technology sharing

Prof. Fukushi

- Industry is a main for implementing roles for academician and partners
- Need to discuss on low carbon and smart energy

Dr. Peter

- Concept of planning
- Conservation
- Interest to part of programme under all the grounds
- Need real practical solutions

Prof. Ijaz:

- Essential knowledge network (specific country, specific area)

- Target for sustainability
- Focus and guidelines
- Output based research is important

Prof. Fukushi:

- Carbon and co-benefit
- JCM indicator has customized by each country
- Indicator need to be approved by the academicians
- Project implemented by the industry.