

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 4- GHG Emission and Mitigation:**

This session was about green house gas emission and mitigation. Altogether three presentations were made in this session by distinguished speakers, namely Prof. Joni Hermana, Dr. Zuhair S Khan, and Dr. Retno Gumilang Dewi.

Prof. Joni Hermana from Sepuluh Nopember Institute of Technology, Indonesia presented paper on Alternative Methods for the estimation of carbon emission from Transportation Sector based on Data Availability. The paper was basically about un-availability of data for research in energy and climate change sector in most of the developing countries. Due to this, there is a problem to make plan and forecast the GHG emission and mitigation. Transportation sector contributes 23% of total GHG emission. To address this issue, the author proposed 3 alternative methods of calculation for GHG emission. Alternative methods proposed by author can be directly applied to calculate the GHG emission and the result received through this method is much closer to the result that produced through IPCC methods.

The second presentation was made by Dr. Zuhair S Khan, National University of Science and Technology (NUST), Pakistan. His presentation was about GHG emission mitigation by renewable and alternative energy technologies backed by sustainable innovations in advanced materials. He raised issue about the GHG emission in Pakistan due to use of fossil fuel based power plants. It can be mitigated by using renewable energy technologies. He proposed different kinds of renewable energy technology and their scopes and potential of GHG emission. He also presented the research activities that are going in his department in National University of Science and Technology.

The third presentation was by Retno Gumilang Dewi from Institute of Technology, Bandung, Indonesia. Her title of presentation was 'Technology options for achieving the low carbon energy in Indonesia'. Energy sector is the second largest emitter of GHG

in Indonesia. She also presented total energy potential of Indonesia. On her presentation, she gave brief information about status of GHG emission which calculated through LEAPFROG method. The government of Indonesia had targeted to achieve the application of renewable energy technology by 4.5% in year 2005 and 25% in year 2025. She also presented energy demand and GHG emission model that they developed in Institute.