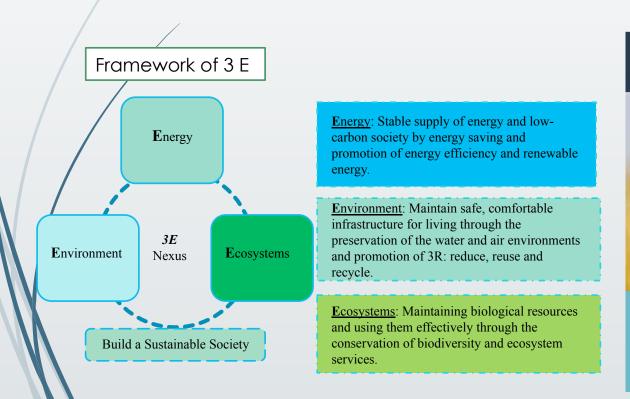
Project Updates: Energy, Environment and Ecosystems (3E) nexus for Sustainable Development in Asia and the Pacific region (2014-17)

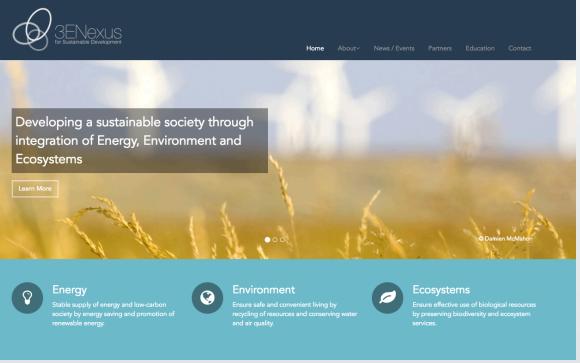
3E Nexus Secretariat, IR3S, The University of Tokyo

## 3E Nexus Initiative for Sustainable Development

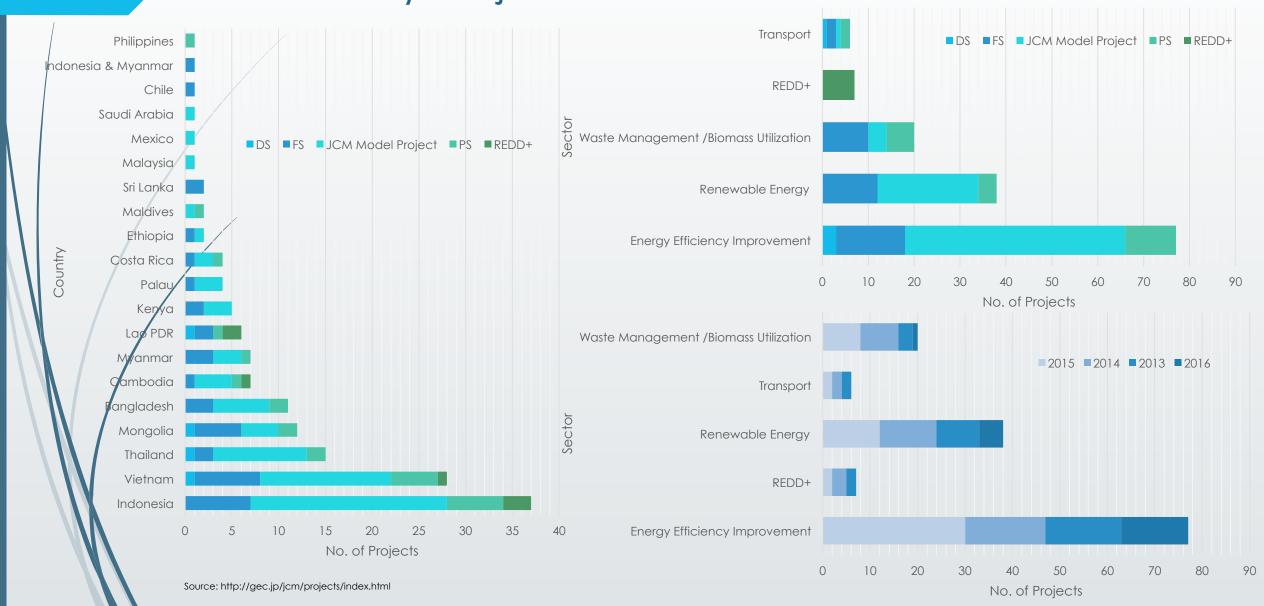
Developing a sustainable society through integration of *Energy, Environment* and *Ecosystems* in Asia-Pacific region.

To establish a research network and to create a platform for better understanding of country and regional level environment, energy and ecosystem problems.



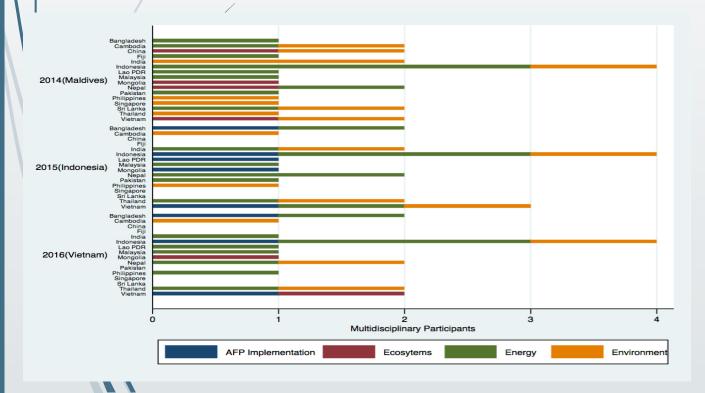


Country and Sector-wise JCM (DS, FS, Model, PS and REDD+) Projects in 2013-16



## 3E Nexus: Importance of Multi-disciplinary towards Sustainable Development

- ☐ To transform society, it is vital to engage with stakeholders and community members to find ways in which science can solve real problems in society.
- □ Integration of multi-disciplinary approach can be bringing together natural, social and human sciences, are key to build the necessary knowledge for sustainable development at all levels.
- ☐ Mutual dialogue between scientists and policymakers is needed to provide a scientific basis for policymaking.



Targeted Regions and sectors in Asia and the Pacific region

Region Targeted Sector

East Asia Ecosystems; Environment and Economy

South Asia Energy Conservation; Ecosystems;

Renewable Energy; GHG Emission and

Mitigation; Environment and Economy

Southeast Asia Energy Conservation; Ecosystems;

Renewable Energy; GHG Emission and

Mitigation; Environment and Economy;

**Environmental Technology** 

Pacific Region Energy Conservation

Source: 3E Nexus Secretariat

# Success of Academic Focal Person (AFP) Initiative in Five Countries

To develop the capacity building activities such as trainings and workshop on Joint Credit Mechanism (JCM) of advanced technologies for low carbon societies.

It is an excellent platform to establish and extend the networking within the country and to promote educational materials, trainings on advanced methodologies, and exchange knowledge within the AFP Network.





AFP Meeting Indonesia.



AFP Meeting Vietnam.



AFP Meeting Laos PDR.



AFP Meeting Mongolia.



AFP Meeting Bangladesh.

6

### Outcomes of 3E Nexus Project

#### Successfully Organized Annual Meeting

to strengthen the international researcher network, increase the capacity and share the information on the participant countries' ongoing research related to low-carbon development and its cobenefits.



1<sup>st</sup> Annual Meeting Maldives.



2<sup>nd</sup> Annual Meeting Indonesia.



3<sup>rd</sup> Annual Meeting Viet Nam.

#### Activities Published in Top Newspapers

Participants attended including H.E. Nguyen Linh Ngoc, Deputy Minister from Ministry of Natural Resources and Environment, Vietnam

#### Published Research Article on 3E Nexus

Proceedings of International Symposium Hanoi Geoengineering 2016

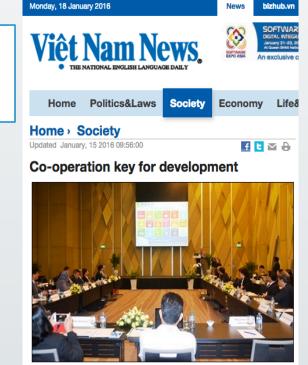
Research Article

Energy, Environment and Ecosystems (3E) Nexus Initiative: Towards Building Sustainable Society in Asia-Pacific Region

Kazuhiko Takeuchi, Geetha Mohan<sup>1</sup>, Kensuke Fukushi, Alexandros Gasparatos and Binaya Kumar Mishra Integrated Research System for Sustainability Science (IR3S). The University of Tokyo Institutes for Advanced Study (UTIAS), Japan.

ABSTRACT: This paper identifies the importance of integrating 3E (energy, environment and ecosystems) for developing a sustainable society and to establish a research networks to generate the motive of a regional low emissions, material-cycling and nature harmonious sphere in Asia-Pacific region. However, our target is not only for preferment of low carbon society but also towards educating regional environment and ecosystems and as well as contributing to the solutions of environmental issues that are foremost to the progress of human wellbeing. The results of this 3E nexus initiative indicate that our transdisciplinary international conferences and country level national focal persons (NPP) collaborative network programs provide an overview of knowledge and practice in the different fields of energy (e.g. renewable energy, energy efficiency and saving), environment (e.g. waste management, control of local air pollution) and ecosystem (e.g. biodiversity conservation, ecosystem management). The Vietnamese NPP collaborative network categorizes that the information knowledge sharing on co-benefits linking with 3E, education-research transfer, disaster risk management, and urban-rural climate smart model transfer to the stakeholders are crucial to encourage and further develop dialogues between researchers, scientists, academicians, engineers, policymakers and other stakeholders. Finally, the 3E nexus network platforms contribute to share their opinions and better understanding of the potential solutions towards sustainable development in the region.

Keywords:3E nexus, research networks, sustainable development, Asia-Pacific region.





Deputy Minister of Natural Resources and Environment Nguyen Linh Ngoc speaks at the workshop (Photo

baotainguyenmoitruong.vn)

## 3E Nexus way forward to new projects developed by Viet Nam and Indonesia

<u>VIETNAM:</u> The International Symposium on "**Energy & Sustainability**" during 21-22 October 2016 at Vietnam National University Hanoi.

The major topics of Symposium focuses on Geoengineering solutions for development of the 3E, consisting of Energy, Environmental and Ecosystems.





INDONESIA: Affordability of Public Participation in Supporting(3E) Nexus for Sustainable Development in the City of Surabaya,East Java, Indonesia.

To investigate the affordability of public participation in maintaining the sustainable development from the perspective of 3E in the city of Surabaya, East Java Province, Indonesia.

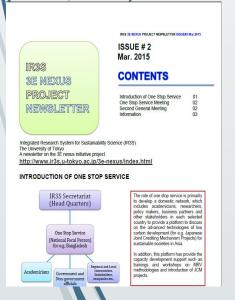
Problems were found to be underestimated, namely: fresh water supply, greenhouse gases and climate change, also food supply.

### Significant Role of 3E Nexus Secretariat

To assist AFP's network for identifying the Japanese counterpart such as Japanese companies information through 3E Nexus secretariat. Remarkably, we were organized a one to one meetings with Japanese companies and AFP countries companies.

The secretariat will also assist Japanese companies to contact our network members in Asia. For instance, one of the Japanese companies PLANTEC Inc. is contacted us to get the updated information about Waste Incinerator (MSW & Industrial) in Thailand.

Published Quarterly Newsletters from 2014-2017











## Tokyo Meeting Agenda

Energy Environment and Ecosystems (3E) nexus towards building resilient societies and implications to Sustainable Development Goals (SDGs) in Asia-Pacific region

Presentation under following three research themes

- Environment
  - Waste Management
- Energy
  - Resource Efficiency
  - Renewable Energy and Energy Efficiency
- Ecosystems
  - Biomass Utilization and REDD+







#### **Study Tour**

Time: 13:00 ~ from the IR3S

Place: Metropolitan of Tokyo, Waste to power generation facility

http://www.tokyokankyo.jp/kengaku/chubo.html

Thank you very much for your participation and Have a pleasant stay in Tokyo