

Academic Contribution for the Development of Low Carbon Society



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The University of Tokyo, Japan

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Outline



- ▶ What is 3E nexus initiative?
- ▶ What are the goals, vision and role of IR3S secretariat?
- ▶ How we are going to implement our research activities?
- ▶ What are the operational resources providing by 3E nexus?

Background

- ▶ Japan is committed to promote low carbon societies within and outside the country of their knowledge, experience, technology by utilizing Joint Crediting Mechanism (JCM) with a greater emphasis on the Asia-Pacific region
- ▶ Seeking solutions for both global and regional issues, for both developed and developing countries
- ▶ Not only for promotion of low carbon society but also towards enriches regional environment and ecosystems. The solution of environmental issues, also leading to the improvement of human well-being.

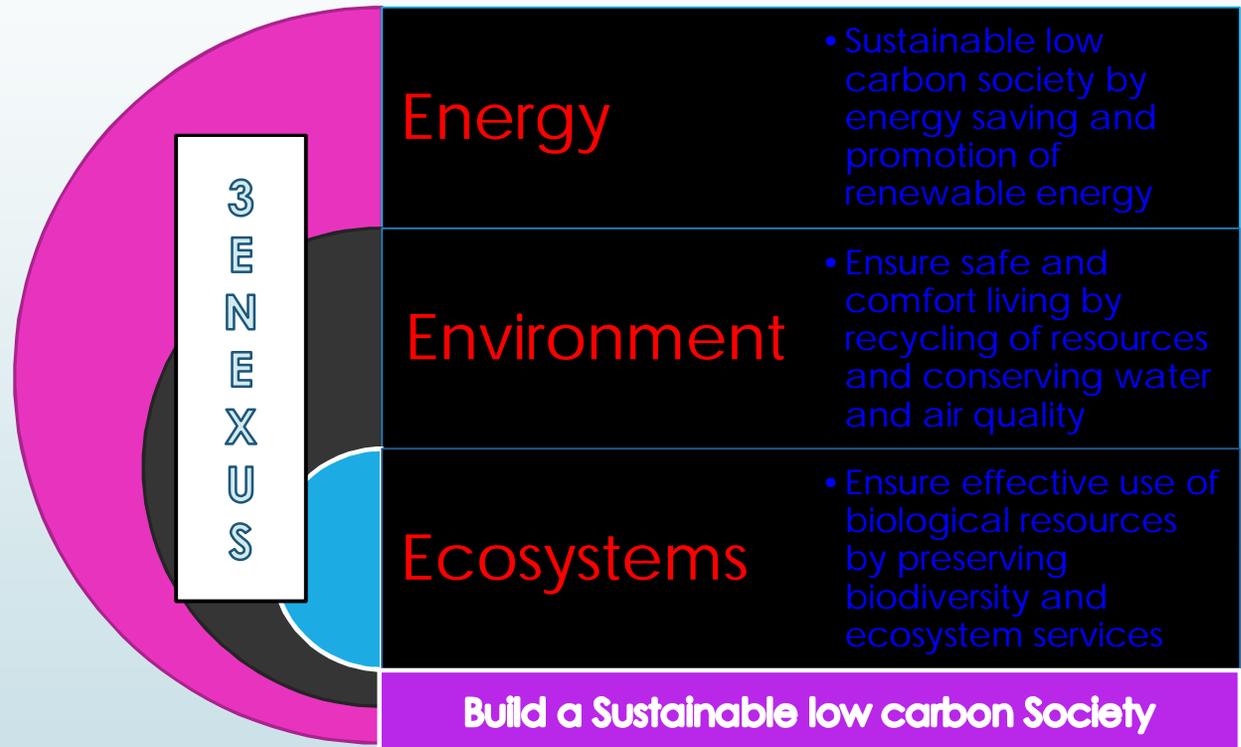
Goals

- ▶ Promote awareness of national/local government and local businesses on JCM and advanced technologies
- ▶ Recognize local requirements and similar with advanced technologies in order to understand co-benefits.
- ▶ Assist Japanese businesses to develop JCM project
- ▶ Create enabling environment for advanced low carbon technologies

Vision

- ▶ 3E nexus is an initiative of IR3S for developing a sustainable society through integration of energy, environment and ecosystems
- ▶ The initiative has produced the idea of a “regional low-emission and nature-harmonious sphere”

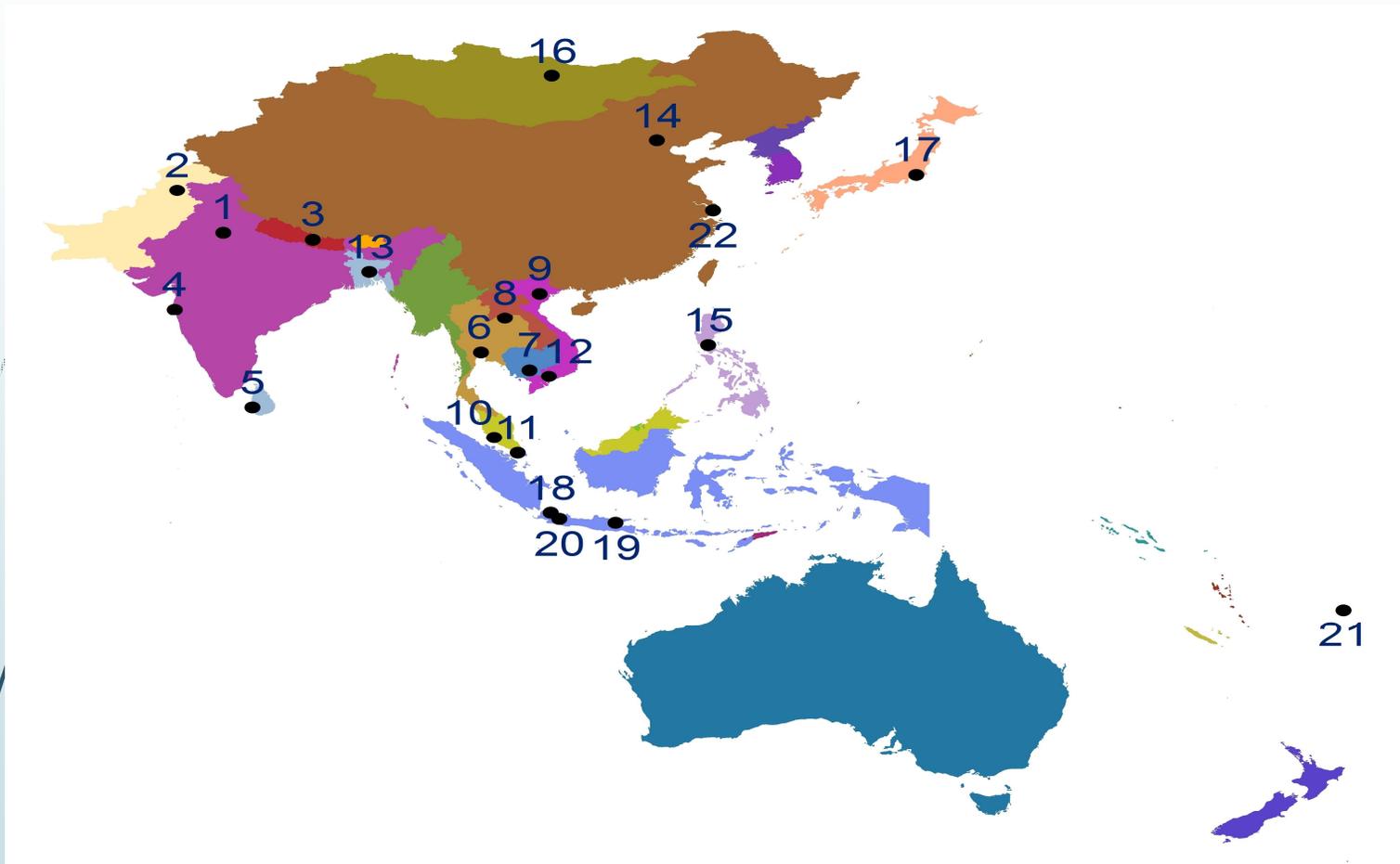
3E Nexus Initiative Framework



Vision

- ▶ The 3E nexus initiative project is an effort to achieve the above goals.
- ▶ Enhancing regional research collaborations on low carbon development in Asia-Pacific countries.
- ▶ Advance mitigation actions by facilitating the diffusion of advanced low-carbon technologies, products, systems and infrastructure in line with the Japanese Joint Credit Mechanism (JCM).
- ▶ Targets capacity development activities such as kick-off meetings, workshops, trainings to understanding on the institutional and technical aspects such as GHG emission reduction projects and Measuring, Reporting and Verification (MRV) methodologies of the JCM both at government and private sectors.

3E Nexus network map



Participated countries: Bangladesh (2), Cambodia (1), China (2), Fiji (1), India (2), Indonesia (4), Japan (4), Laos PDR (1), Malaysia (1), Mongolia (1), Nepal (2), Pakistan (1), Philippines (1), Singapore (1), Thailand (2), and Vietnam (3).

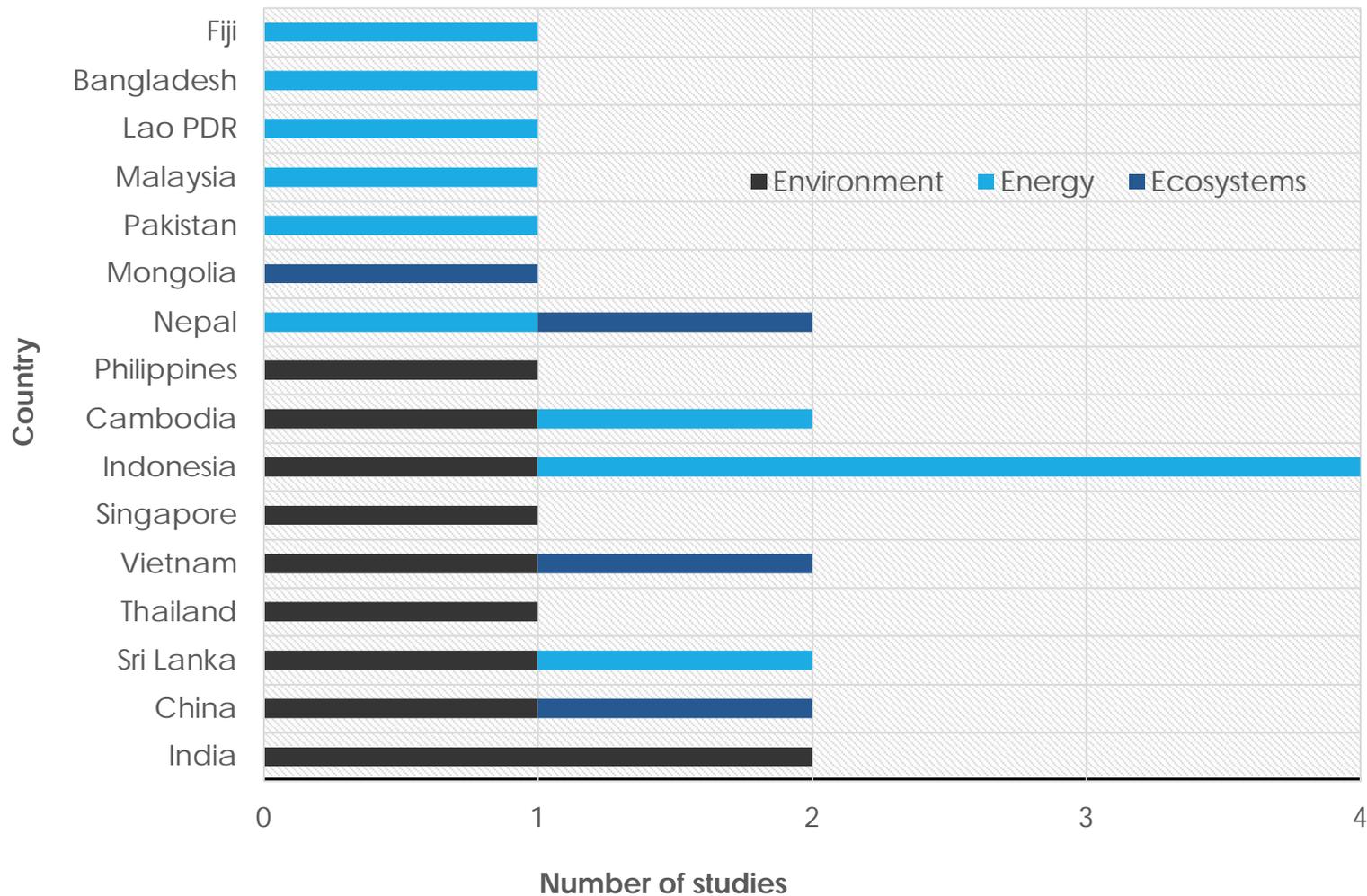
First kick-off meeting: Asia-Pacific regional initiative on energy, environment and ecosystems for sustainable development



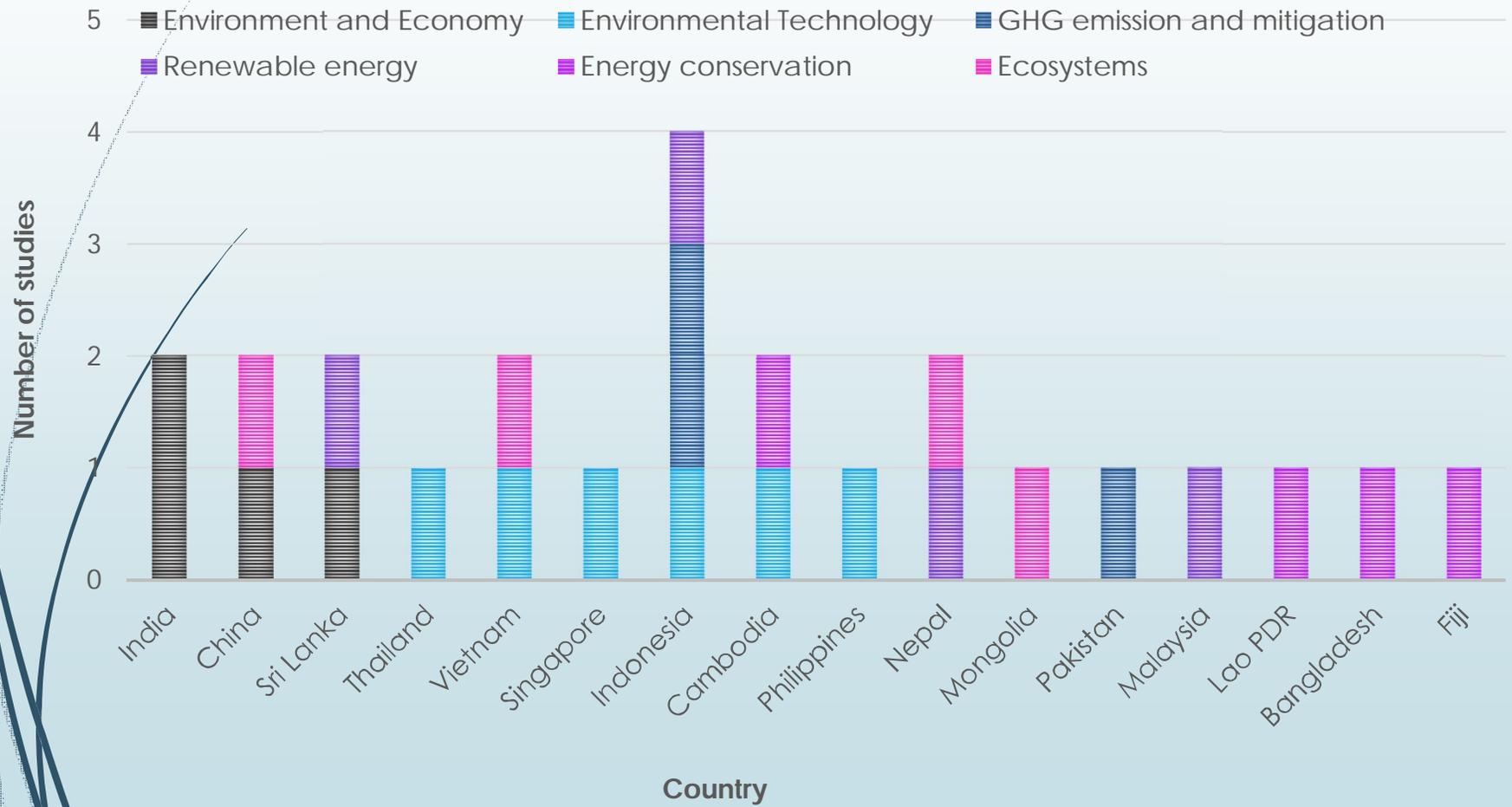
Participants group photo, Maldives

- ▶ Meeting was held in Maldives on 24-25th, February 2014.
- ▶ Discussed on how to implement the objectives of the 3E Nexus initiative.
- ▶ Invited leading specialists with a wide range of expertise on energy innovations, environmental technologies and ecological systems from Asia-Pacific countries

Country-wise targeted sector in Maldives meeting



Country-wise targeted disaggregate sectors in Maldives meeting



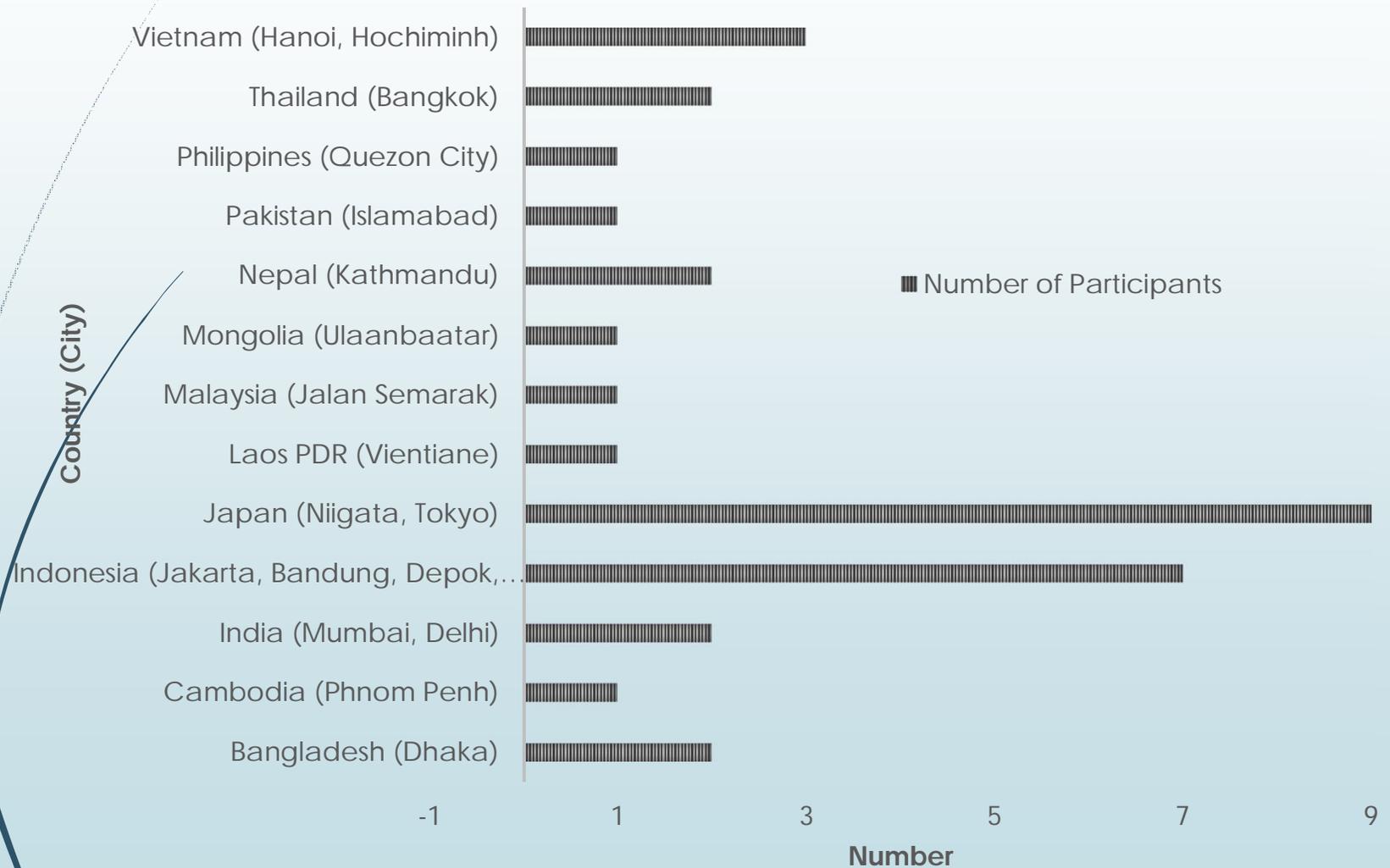
Second Annual Meeting: Energy, Environment and Ecosystems (3E) Nexus Initiative for Sustainable Development in Asian Countries



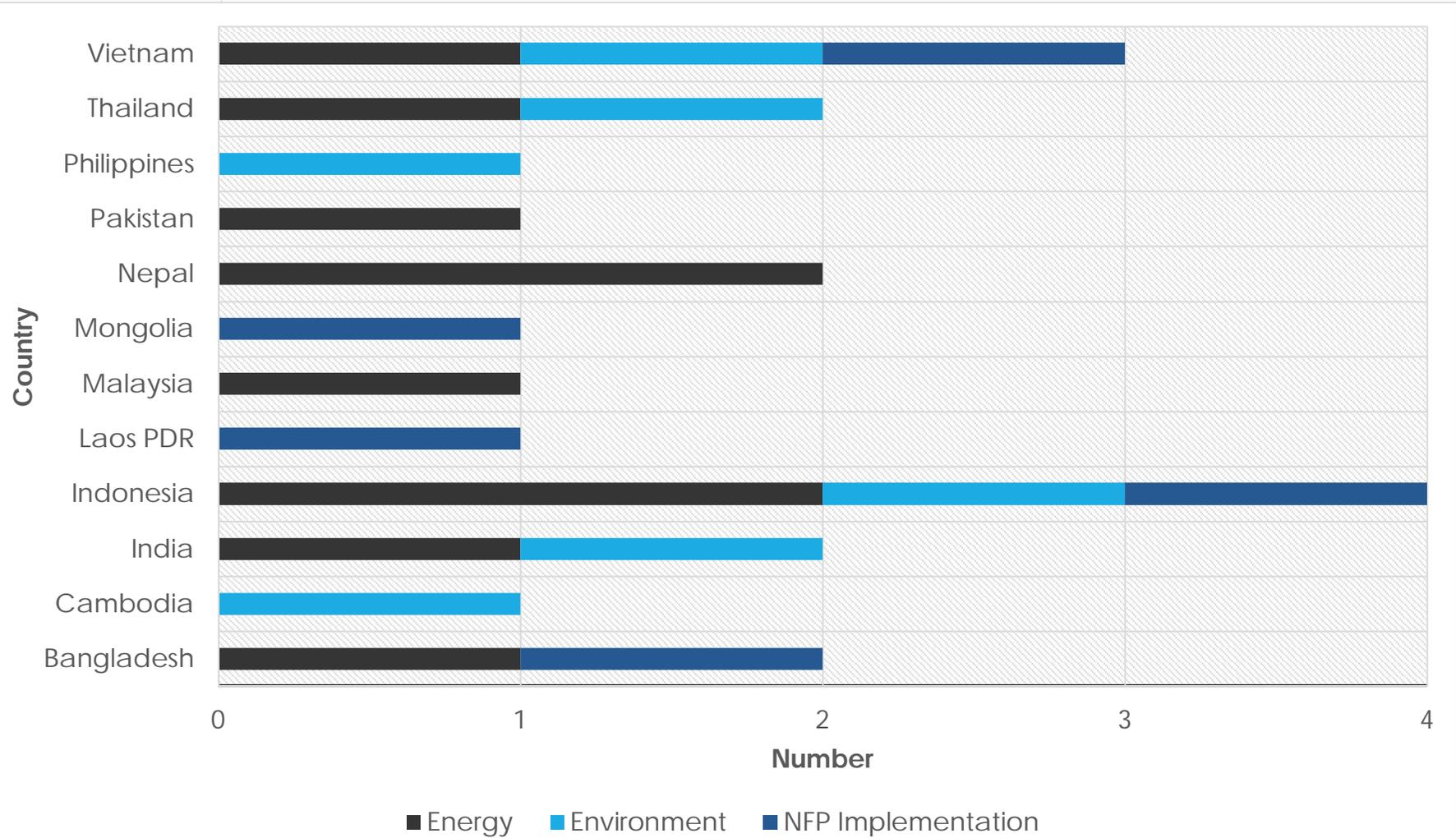
- Capacity Development (to promote and educated JCM)
- Domestic Network Consortium (to develop a research network within the country by National Focal Person (NFP))
- Policy Dialogues and Industrial Dialogues
- Assessment (in terms of social and economic)

Meeting was held in Bali, Indonesia on 26-27th, February 2015.

Country-wise participants in Bali Meeting, Feb. 2015



Country-wise NFP Implementation and Targeted Sectors in Bali Meeting

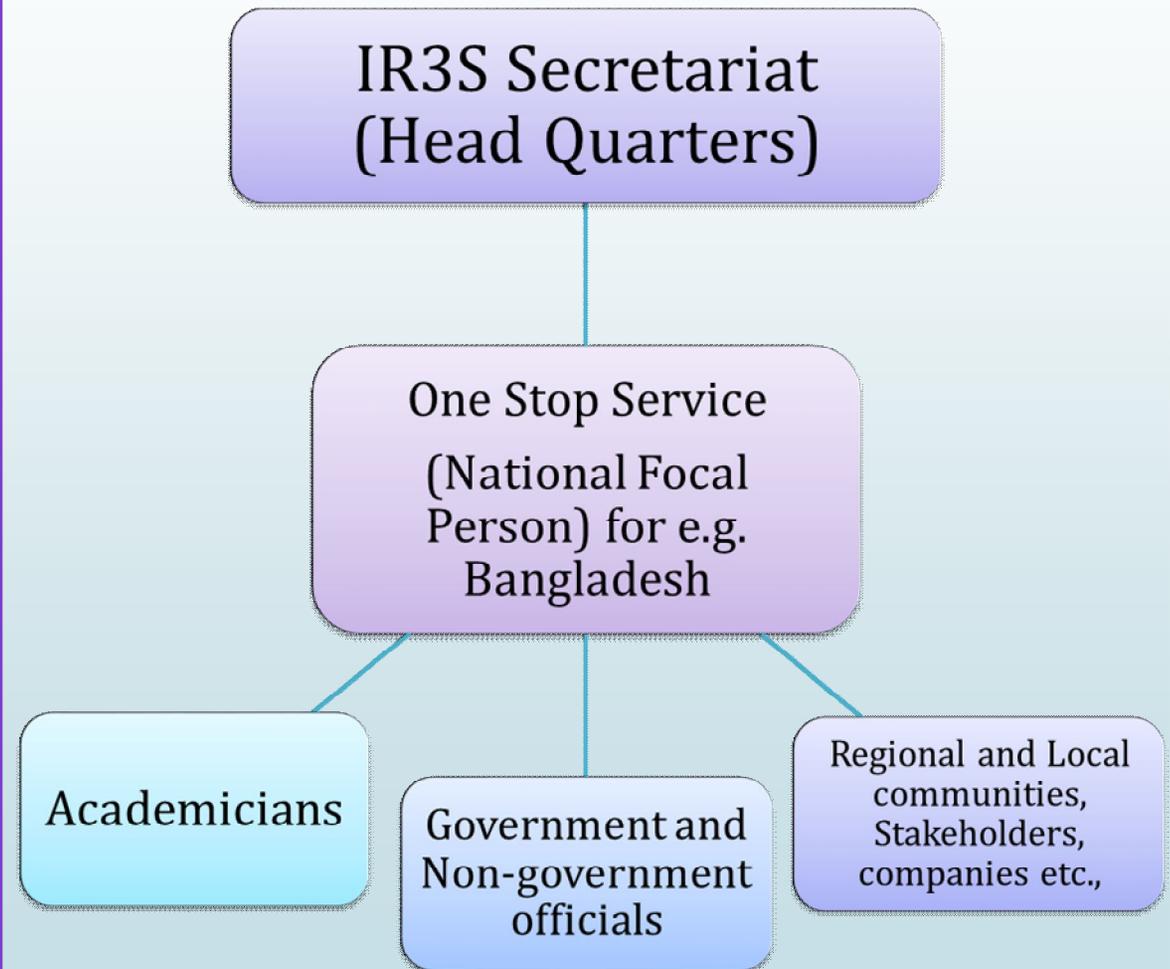


Outputs from First and Second Annual Meetings

- ▶ Capacity building inputs: workshops, training, publication and data sharing for participated countries
- ▶ To share knowledge, dissemination and advanced low carbon technologies through our network.
- ▶ Indicators (for e.g. JCM) need to be approved by the academicians and partners for sustainable low carbon development.
- ▶ Guidelines of materials and teaching education to the government officials, stakeholders, academician, researchers through IR3S secretariat.
- ▶ Establishment of One Stop Service/ National Focal Person
- ▶ To discuss on advanced low carbon technologies such as JCM and in order to understand co-benefits.

One Stop Service / National Focal Person

- ▶ To develop a domestic network, which includes academicians, researchers, policy makers, business partners and other stakeholders.
- ▶ To provide a platform to discuss on the advanced technologies of low carbon development (for e.g. Japanese Joint Crediting Mechanism Projects) for sustainable societies in Asia.



NFP Workshops in Selected Countries

Aim: Capacity development support such as trainings and workshops on MRV methodologies and introduction of JCM projects.

NFP Workshop in Indonesia

Joint Crediting Mechanism



Participants group photo, Indonesia

- ❑ Organized by Prof. Tjandra Setiadi, Indonesia National Focal Person (NFP) on Jan. 19th, 2015 held at Institute of Technology Bandung, Indonesia.
- ❑ Participants attended from Secretariat JCM Indonesia, Ministry of Energy and Mineral Resources, Universities, Businesspersons and Policymakers.

NFP Workshop in Vietnam

Exploring Opportunities and Challenges for Joint Crediting Mechanism Projects for Development of Low-carbon Society in Vietnam



Participants group photo, Vietnam

- ❑ Organized by Prof. Mai Trong Nhuan, Vietnamese National Focal Person (NFP) on Jan. 24th, 2015 held at Vietnam National University, University of Science, Hanoi, Vietnam.
- ❑ Participants attended from Ministry of Natural Resources and Environment, Department of Hydrology, Meteorology and Climate Change, Petro-Vietnam Gas City Investment and Development, Universities, Businesspersons and Policymakers.

NFP Workshop in Mongolia

Joint Crediting Mechanism towards Sustainable Low-Carbon Society Development in Mongolia

- Organized by Prof. Tsogtbaatar Jamsran, Mongolia National Focal Person (NFP) on Feb. 13th, 2015 held at Chinggis Khaan Hotel, Ulaanbaatar, Mongolia.
- Participants attended from Ministry of Environment and Green Development, Mongolia Academy of Sciences, Universities, Businesspersons and Policymakers.



Participants group photo, Mongolia

NFP Workshop in Laos PDR

Joint Crediting Mechanism towards Sustainable Low-Carbon Society Development in Laos PDR



Participants group photo, Laos PDR

- Organized by Mr. Oroth Sengtaheuanghoung, Laos PDR National Focal Person (NFP) on Feb. 13th, 2015 held at DALaM meeting room, Nonviengkham, Saythany District, and Vientiane Capital.
- Participants attended from Ministry of Science and Technology, Ministry of Energy and Mining, Ministry of Natural Resources and Environment, Ministry of Agriculture and Forestry, University of Laos, Businesspersons, Policymakers and National Agricultural Research Institute.

NFP Virtual Skype Workshop with Bangladesh

Joint Crediting Mechanism towards Sustainable Low-Carbon Society
Development in Bangladesh

- Organized by Prof. Md. Mafizur Rahman, Bangladesh National Focal Person (NFP) on Feb. 16th, 2015 held at IR3S Conference room, The University of Tokyo, Japan.
- Participants attended from Bangladesh University of Engineering & Technology, IDLC Finance Limited, USAID-CCEB Program, Centre for Engineering & Technical Assistance (CETA) and Leather Technology.



Participants in Virtual Skype Workshop, Bangladesh and Japan

Implementation

Third meeting: Energy, Environment and Ecosystems (3E) Nexus Initiative for Sustainable Development in Asian Countries

- Meeting was held in Da Nang, Vietnam on 14-15th, January 2016.
- Inviting targeted countries leading specialists on energy innovations, environmental technologies and ecological systems from Asia-Pacific countries
- To discuss on advanced low carbon technologies such as JCM and in order to understand co-benefits.

Implementation

National Focal Person (NFP) Workshops in Vietnam, Indonesia, Bangladesh, Mongolia and Laos PDT

- Meeting will be held in all five countries on December, 2015 to February, 2016.
- Inviting targeted participants are mainly from Industries, NGO's, Government Agencies, Academicians and Leading Scientists.
- To promote and educate advantages of JCM in order to understand co-benefits.
- Project Proposal development.

Role of Secretariat

- ▶ Promote 3E nexus initiative activities in Asia-Pacific countries through kick-off and general meetings.
- ▶ Develop capacity building with research partners and exchange methodologies, technology, knowledge sharing for sustainable low carbon development.
- ▶ Be an engagement platform to regional partners, national and domestic level research institutions, academicians and scientists.

Resources

Internal sources

Please visit www.ir3s.u-tokyo.ac.jp/3e-nexus/index.h

- ▶ Workshop materials
- ▶ Capacity building activities such as training and education

Other sources

More info on JCM, please visit

<https://www.jcm.go.jp>

<http://www.mmechanisms.org>

Acknowledgements

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Regional Partners

Indonesia: **Prof. Tjandra Setiadi**

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Vietnam: **Prof. Mai Trong Nhuan**

Bangladesh: **Dr. Md. Mafizur Rahman**

Laos PDR: **Mr. Oroth Sengtaheuanghoung**

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