



# **WORKSHOP ON DESIGNING AND ESTABLISHING LCS DEVELOPMENT**

## **Low Carbon Development Network in Cambodia**

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# MoU between MoE, Cambodia and IGES on Capacity Building and networking for LCS Research Network

## MEMORANDUM COOPERATION BETWEEN MINISTRY OF ENVIRONMENT, CAMBODIA AND INSTITUTE FOR GLOBAL ENVIRONMENTAL STRATEGIES

The Ministry of Environment of Cambodia (MoE), and the Institute for Global Environmental Strategies (IGES), hereinafter the Parties, recognise that MoE has an important role in the implementation of the Cambodian National Strategic Development Plan (NSDP) Update (2009-2013) which puts climate change as a major priority of the Royal Government of Cambodia.

Both parties recognise the role of MoE as the Cambodian Focal Point to the United Nations Framework Convention on Climate Change (UNFCCC), and recognise the importance of pursuing sustainable low-carbon development, in such a way as to integrate GHG mitigation and adaptation strategies and policies in line with the Cambodian Millennium Development Goals (CMDGs).

It has been emphasised that MoE recognises the importance of long-term planning with the identification of suitable policy- and technology options for science-based policy-making in pursuing sustainable low-carbon development in Cambodia.

It should be noted that IGES is an international research institute aiming to address and provide practical solutions to global environmental issues, such as climate change, in the Asia-Pacific region. Its mission is to promote, carry out and deliver policy-oriented and practical research, i.e. strategic research, to disseminate and exchange information on the global environmental issues, and to assist in solving environmental problems in and for the Asia-Pacific region.

In addition, IGES was designated as the Secretariat of the International Research Network for Low Carbon Societies (LCS-RNet Secretariat) which was established under the initiative of the G8 Environmental Ministers Meeting held in May 2008 in Kobe, Japan. The LCS-RNet Secretariat/IGES is situated in IGES and provides internship to policy-makers and researchers in Asia to familiarise them with LCS-related research, particularly in the development of sectoral, local and national scenarios towards LCS of their own countries

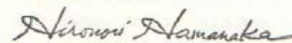
Both Parties firmly intend to contribute to the sustainable development of mutually beneficial cooperation in the field of climate change, and have come to an agreement on the following issues:

1. The Parties will cooperate with each other with a view to exploring ways to achieve sustainable low-carbon development in the Kingdom of Cambodia.
2. The Parties, under the activities of the LCS-RNet Secretariat at IGES, will cooperate in building capacity for science-based policy-making in the Kingdom of Cambodia, to contribute to developing long-term strategies for the sustainable low-carbon development.
3. Any collaborative activity, referred in 1., and 2. above, to be decided in the future will be bound by separate agreement between the Parties.
4. Any amendment to the agreement on this memorandum should be made by mutual consent via exchange of letters. Such amendments will come into force on the date when a revised document of agreement is signed by the Parties.
5. Any dispute arising out of or in connection with this mutual understanding shall be settled in close consultation with each other.
6. The agreement may be terminated by either of the Parties with the six months' notice in advance to the other Party.

For IGES

For the Ministry of Environment of the  
Kingdom of Cambodia

Signature



Professor Hironori Hamanaka  
Chair of the Board of Directors  
Institute for Global Environmental Strategies

Date: 2 February 2011

Signature



H.E. Dr. Mok Mareth  
Senior Minister, Minister of Environment  
Kingdom of Cambodia

Date: 22 Feb 2011

# I. Background of LCS Network

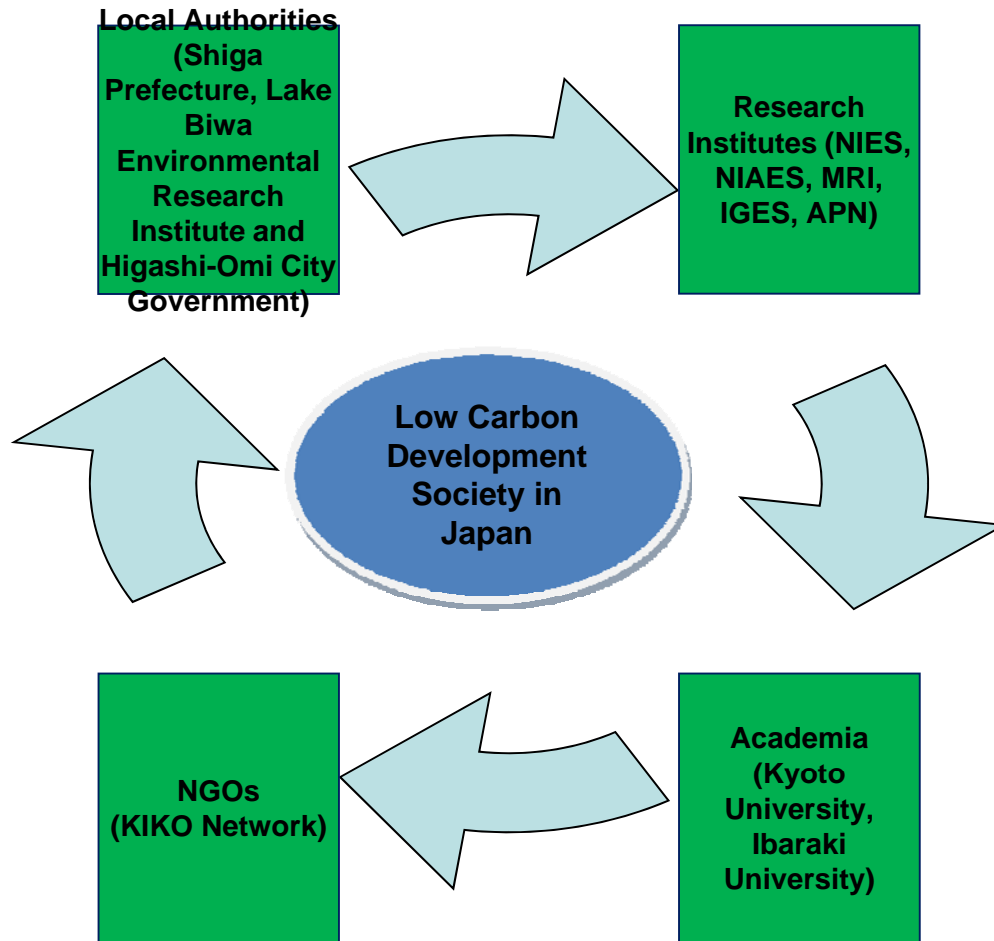
- ❑ Attended workshop on Dialogue between policy makers and researchers: Demands and Roles of Sustainable Low Carbon Development researches from policy perspective Low-carbon society model capacity building, 17-19 Nov. Bangkok, Thailand;
- ❑ Organized first workshop on Scientific Approaches towards Low Carbon Development in Cambodia: Concept, Methodology and Tools for Planning Low Carbon Development 10<sup>th</sup> Jan. 2011 in Cambodia;
- ❑ Attended Training workshop on the Asian-Pacific Integrated Model (AIM) 2011 from 6-17 June 2011 in Tsukuba, Japan;
- ❑ Attended Workshop on Asian Low Carbon Society Research Network 4-5 July 2011 in Johore Bahru, Malaysia;

- ❑ Attended 2<sup>nd</sup> International Workshop on Low Carbon Asia Research Project 31<sup>st</sup> Oct-1<sup>st</sup> Nov. in Johore Bahru, Malaysia;
- ❑ Attended International Research Network for Low Carbon Societies (LCS-RNet) training programme (Internship) from 26<sup>th</sup> Sept. to 14<sup>th</sup> Oct. 2011, IGES, Japan with the objective for: *1) knowledge exchange on adaptation, mitigation and policy in climate change field in order to strengthen research activities in Cambodia; 2) search possibility of applying Integrated Assessment Model (AIM) to Cambodian GHG reduction policy like National Appropriate Mitigation Action (NAMA), and 3) search possibility of future cooperation with Japan in climate policy field.*
- ❑ Attended a discussion on development of LCS for Cambodia with Kyoto University 10-14 Feb. 2012; and

## II. LCS and LCS-RNet Definition

- ❑ **Low-Carbon Society (LCS)** will serve as a guiding principle and strategy to turn the challenges of today into opportunities so that Cambodia can make headway towards sustainable economic growth and environmental sustainability.
- ❑ **Low Carbon Society Research Network (LCS-RNet)** is a tool to promote and encourage the dialogues and close cooperation among policy makers, researchers, and other stakeholders, including businesses and citizens to work together to ensure sustainable economic development and environmental sustainability.

# III. Experience of LCS-RNet in Japan



## IV. LCDS and LCS-RNet in Cambodia

- ❑ *What does it mean by low carbon development society (LCDS)?*

*A Low-Carbon Society (LCS) Development refers to the development of an economy which has a minimal output of GHG emissions into the atmosphere.*

- ❑ *Why does Cambodia need LCS?*

*The concept of LCS is considered the important economic development tool for economic development in Cambodia*



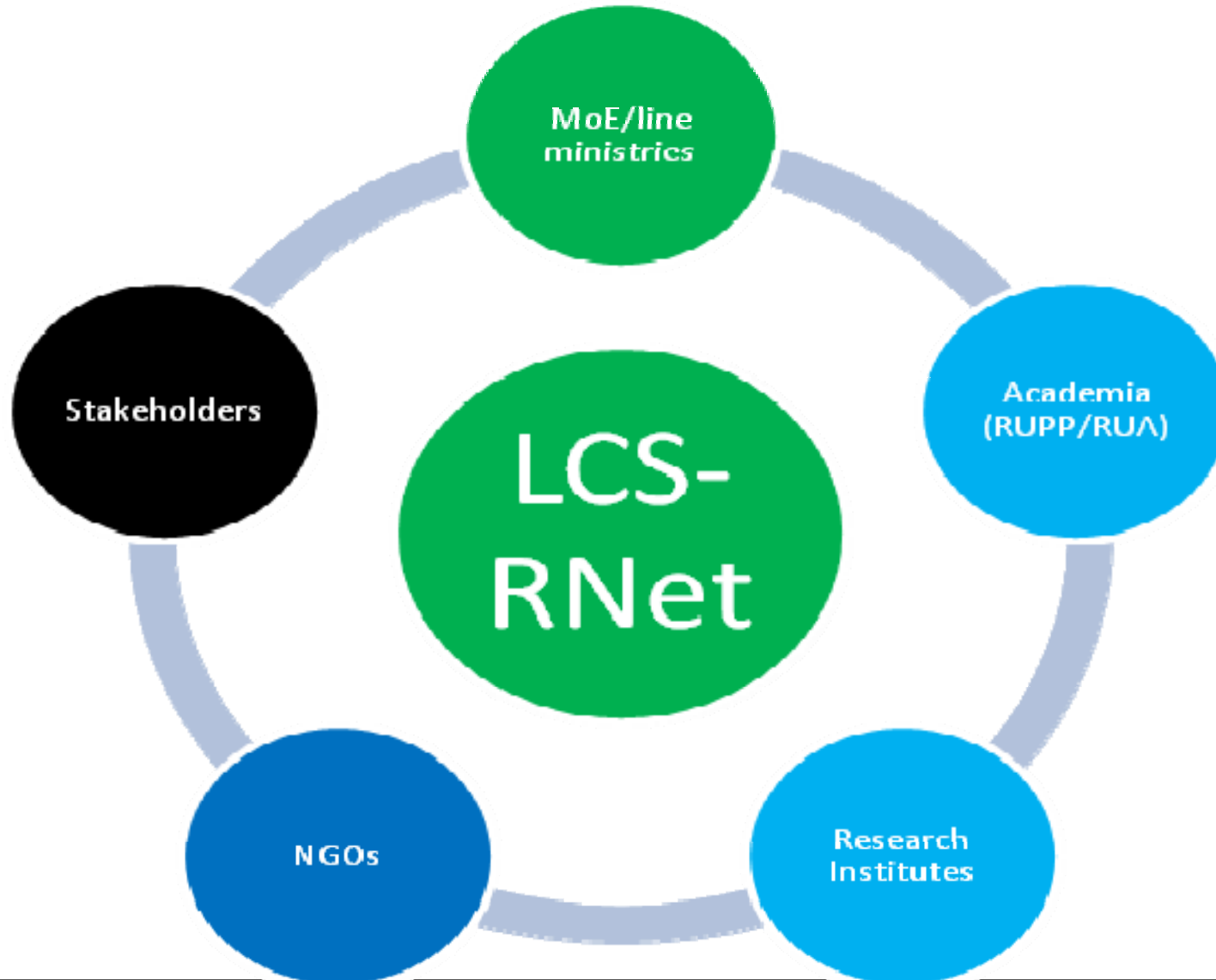
## **V. EXISTING LOW CARBON RELATED Policy**

- ❑ Cambodia' s sustainable development strategy (Agenda 21);**
- ❑ Cambodian millennium development goals (CMDG) (2003);**
- ❑ RS and NSDP;**
- ❑ GG Roadmap and Master Plan;**
- ❑ National Forest Programme;**
- ❑ National Energy Efficient Policy/Strategy; and**
- ❑ Sustainable Transportation Development Plan.**

# VI. Low Carbon Society Research Network Plan (LCS-RNet) in Cambodia

- ❑ Where is Cambodia in the field of LCS-RNet?
  - LCS-RNet was born in Cambodia in Feb. 2011 through signing MoU between MoE;
  - Limited understanding of LCS Research network among line ministries, academia and institutions; and
  - CCD working on Climate Change Both Adaptation and Mitigation (GHG Inventory and V&A assessment).

# VII. LOW CARBON DEVELOPMENT Research Network Plan in Cambodia



## VIII. Building LCS-RNet Activities in Cambodia

### □ *Government' s ministries*

- Develop concrete national strategy on LCS;
- Cooperate with international communities for low LCS research work;
- Build human capacity through nominating for LCS training, especially in Japan;
- Establish research institute under ministries;
- Encourage researchers for LCS research;
- Mobilize resources for LCS research;
- Encourage the participation from academia, NGOs , Research Institutes and stakeholders for LCS research; and
- Mainstream LCS concept into line ministries and sub-national level.

## ❑ Academia

- Select two Government universities: Royal University of Agriculture and Royal Phnom Penh University and one private university;
- Participate with international universities for LCS training and research activities ( like Kyoto University, Japan);
- Encourage researchers to conduct LCS research and activities;
- Need to have strong commitment for LCS research activities;
- Share the research findings on LCS with decision makers;
- Mainstream LCS subject into curriculum calendar;
- Convince the decision makers to believe on the research findings with clear explanation and reference so that the decision makers can use for country development;

## ❑ *Research Institutes*

- Mainstream LCS subject into research plan;
- Participate with international universities and institutions for LCS training (like NIES in Japan) and workshops;
- Encourage researchers to conduct LCS research;
- Allocate budget for LCS research activities;
- Share the research finding with decision makers and other stakeholders;
- Convince the decision makers to believe on the research findings with clear explanation and reference so that they use for economic development;
- Demonstrate the research findings via implementing pilot project; and
- Be willing to work with other international

## ❑ *Non Governmental Organizations (NGOs)*

- Mainstream LCS subject into their respective strategies;
- Encourage researchers for LCS research;
- Allocate budget for LCS research activities;
- Share the research finding on LCS with decision makers;
- Convince the decision makers to believe on the research findings with clear explanation and reference so that they use for economic development;
- Convince the decision makers to believe on the research findings with clear explanation and reference;
- Demonstrate the research findings via implementing pilot project; and
- Be willing to work with international communities on LCS and international climate change conference

## □ *Stakeholders*

- Share information and data from their respective offices/stations for the purpose of LCS research;
- Implement recommendations and guidance advised based the LCS research findings;
- Cooperate with the government agencies to ensure effective LCS implementation; and
- Be willing to work with other stakeholders and international communities.



## IX. Selection of LCS Development Model

- ❑ Cambodia is encouraged to choose ExSS. model (Extended Snapshot) for low carbon development.
- ❑ ExSS. Demo Version is a simplified version of ExSS. for demonstration and training.
- ❑ ExSS. is an estimation tool used for LCS study based on the idea of “back casting” .
- ❑ It estimates future society as a social goal It is a static, accounting type model which describes consistent future state of demography, economy, transport, energy use, low-carbon measures and CO<sub>2</sub> emissions.
- ❑ Consideration of the extension of ExSS. (not Demo Version) to land use, forestry, agriculture, water and air pollution, waste emission and disposal, etc.
- ❑ Information needed: input/output data and energy balance sheet. In addition, some other related data will be included such as Population growth, Household size, Industrial structure, and Transport demand.

## **X. Ways forward for LCS RNet development and enhancement**

The following supports and concerns shall be considered including:

- ❑ Building human resource through providing training and fellowship to researchers for Government, Research institute and academia
- ❑ Building climate change research center, JICA or ADB and other potential donors shall play the leading roles;
- ❑ Seeking and providing sufficient budget support for LCS-RNet and LCS research activities;
- ❑ Providing opportunity to researchers to study (Master/Doctoral Degree) in Japan or other countries so that they have sufficient capacity and capability to work on LCS;
- ❑ Bringing researchers and students from Cambodia to visit Japan's research institutes and universities as well as other relevant institutions for exchanging experience and knowledge on LCS development; and

**THANKS FOR YOUR  
ATTENTION!**