



Parallel Session 1-2_B: Innovative Monitoring, Reporting and Verification System in Asian Countries

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The presentation includes research outcomes from The Environment Research and Technology Development Fund (ERTDF, 2-1711) of Environmental Restoration and Conservation Agency and Ministry of the Environment, Climate Change Adaptation Research Program of NIES, the “Project to Promote CO₂ Technology Assessment (from FY2014-2017)” of Ministry of the Environment, Japan, and JSPS-DG-RSTHE Joint Research Project funded by the Japan Society for the Promotion of Science.

LoCARNet 7th Annual Meeting
November 21-22, 2018 at Arya Duta Hotel – Jakarta, Indonesia

Current Research Questions



(1) What are National/Regional Targets and Actions towards the SDGs in Asia?

(2) How to Design Roadmaps/Pathways towards the SDGs at National/Regional Scale?

Sustainable Society

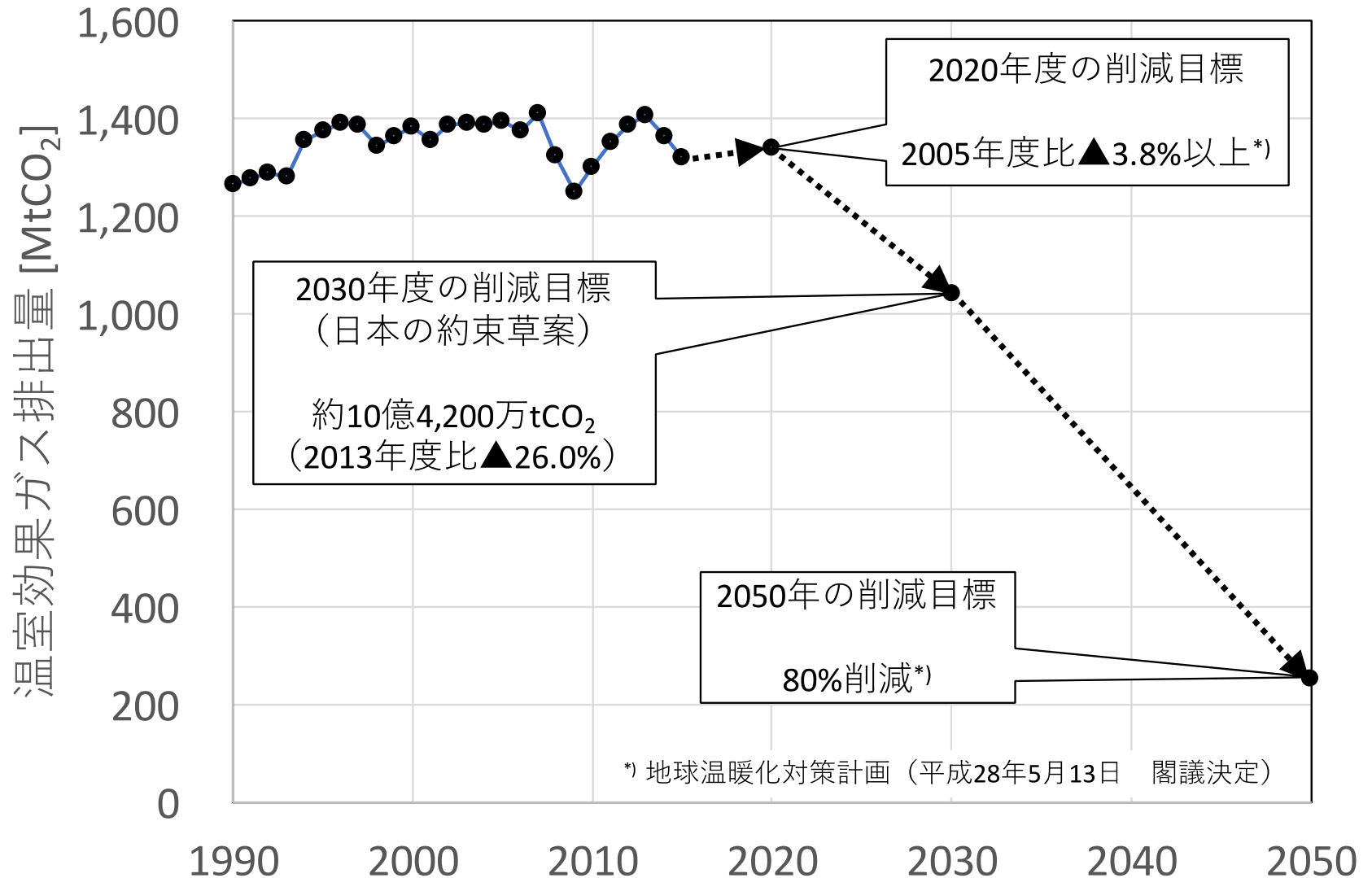
Now

2015 2020 2030 2040 2050

(3) How to Monitor Progresses and Impacts of Actions (or MRV for Actions) towards the SDGs?

(4) How to Integrate (1) to (3), and the Role of S&T

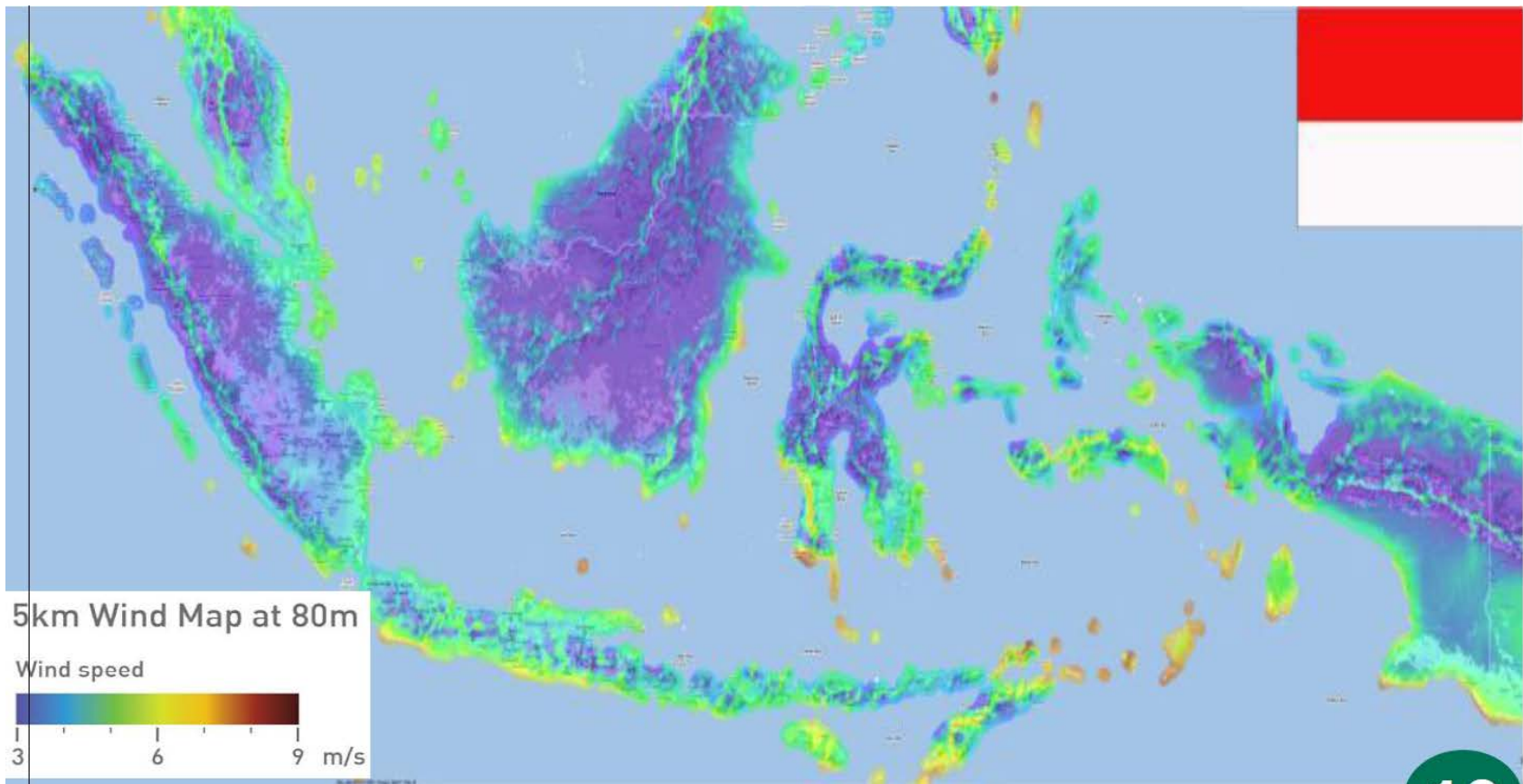
Way to Monitor Progress in Mitigation: Reduction in GHG Emissions



Region/Subnational is *NOT* miniature of national situation.

- Regional characteristics should be considered for MRV in regional/city.

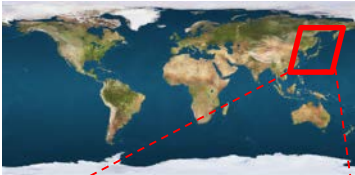
Example: Wind situation differs island and island, and area by area.



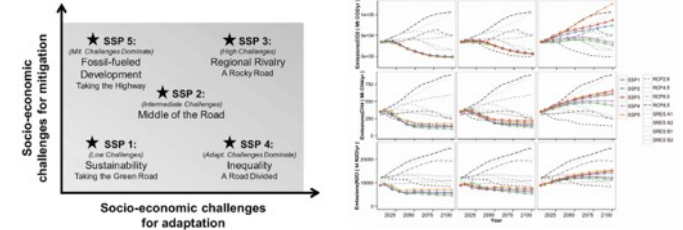
Different Scale, Intercorrelating among Scales

- Different scales but all things are intercorrelated.

Global



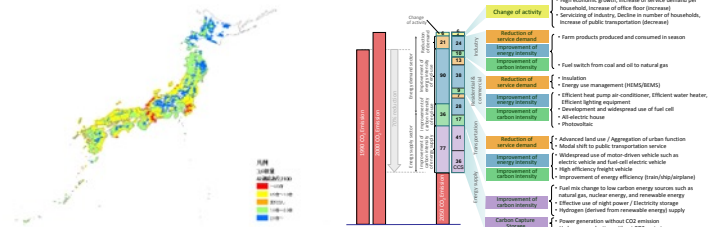
- Representative Concentration Pathways (RCPs)
- Shared Socio-Economic Pathways (SSPs)
- Food hunger risk



National



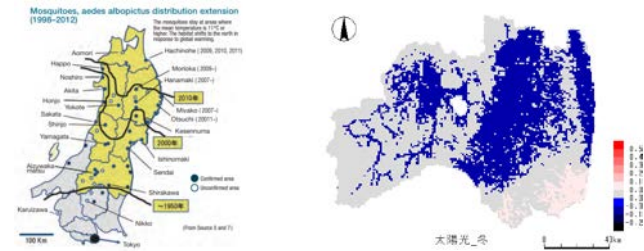
- Low Carbon Scenario
- Adaptation Strategy
- Nationally Determined Targets (NDC)
- Greenhouse Gas Inventory



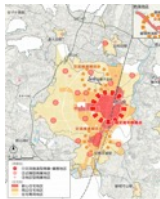
Regional



- Low Carbon Development Plan
- Low Carbon Actions
- Adaptation Strategy
- Regional Energy Potential



City



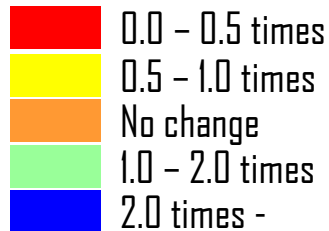
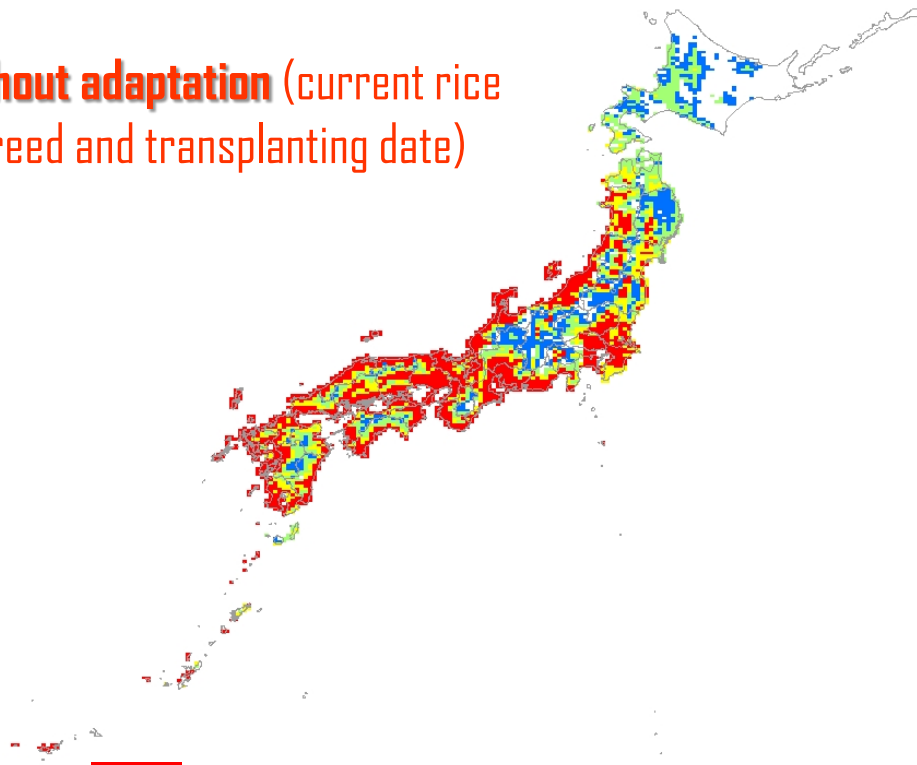
- Low Carbon Town Planning
- Compact city
- Project Design
- Stakeholders Involvement
- Social Monitoring



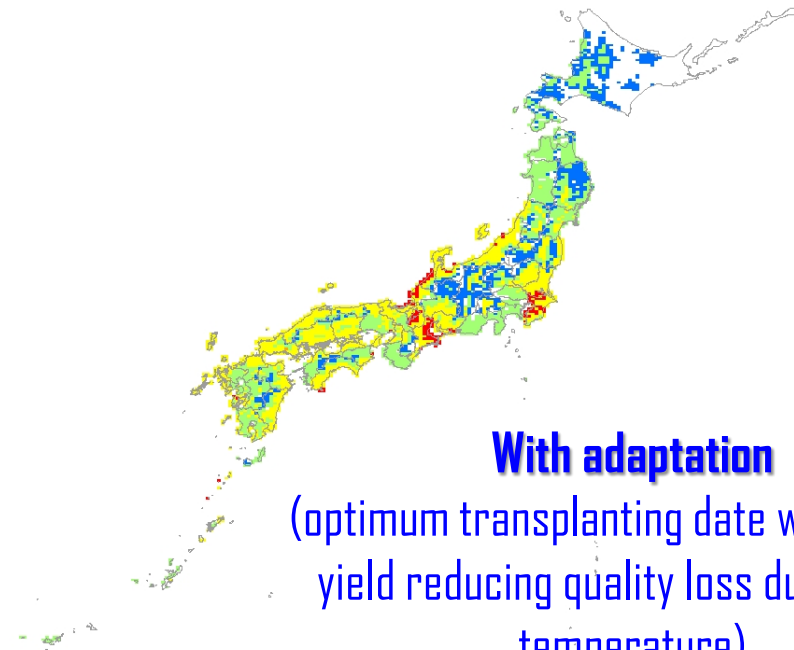
Climate Change Impacts/Adaptations also important

Rice yield considering quality (RCP8.5, MIROC5)

Without adaptation (current rice
breed and transplanting date)



With adaptation
(optimum transplanting date with a large
yield reducing quality loss due to high
temperature)





Steps for National Adaptation Plan/Law in Japan

Fourth Environment Basic Plan (Cabinet Decision, April 2012) decided to assess impacts of climate change and to promote adaptation measures

“Expert Committee on Climate Change Impact Assessment” was established under Central Environment Council (2 July, 2013)

- Projection of climate change and its impacts in Japan
- Reviews for more than 500 papers by 57 experts
- Assessment for 56 items in 7 sectors
- Expert judgement on significance, urgency and confidence levels

Report on Climate Change Impact Assessment in Japan (10 March, 2015)

Inter-Ministry Meeting for Climate Change Adaptation (11 September, 2015)

National Adaptation Plan was draft by the Inter-Ministry Meeting, and called for **public comments** (23 October, 2015)

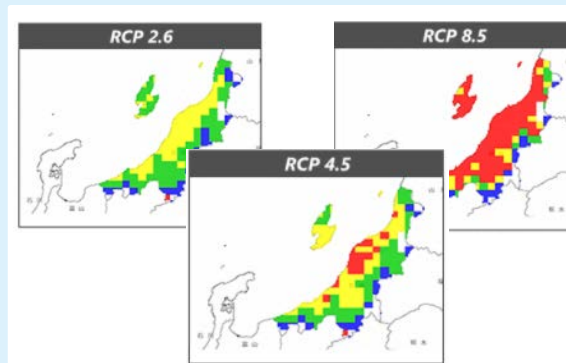
National Adaptation Plan was formulated (Cabinet Necision, 27 November 2015)

National Climate Change Adaptation Law will be enforced on 1st Dec., 2018

Outline of A-PLAT

- **A-PLAT** (Climate Change **A**daptation **P**latform) is a “**One-stop**” online resource for adaptation to climate-change impacts in Japan.
 - Aims at being a basis for adaptation actions of local governments, businesses, and citizens.
 - Collects and provides climate risk information and best practices; develops tools to promote adaptation actions.
 - Operated by NIES with cooperation of relevant ministries.

Provide climate risk information



Stakeholders:



Local Government



Private Sectors



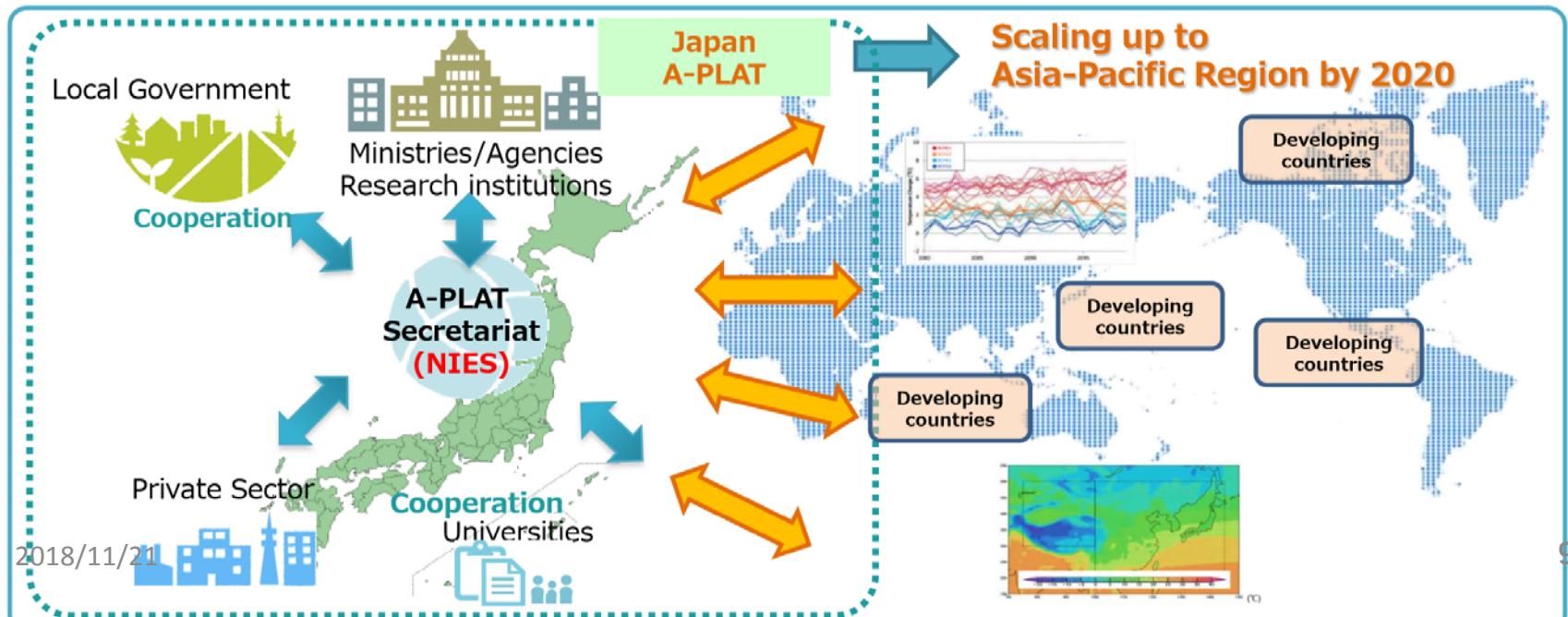
Individuals & Communities



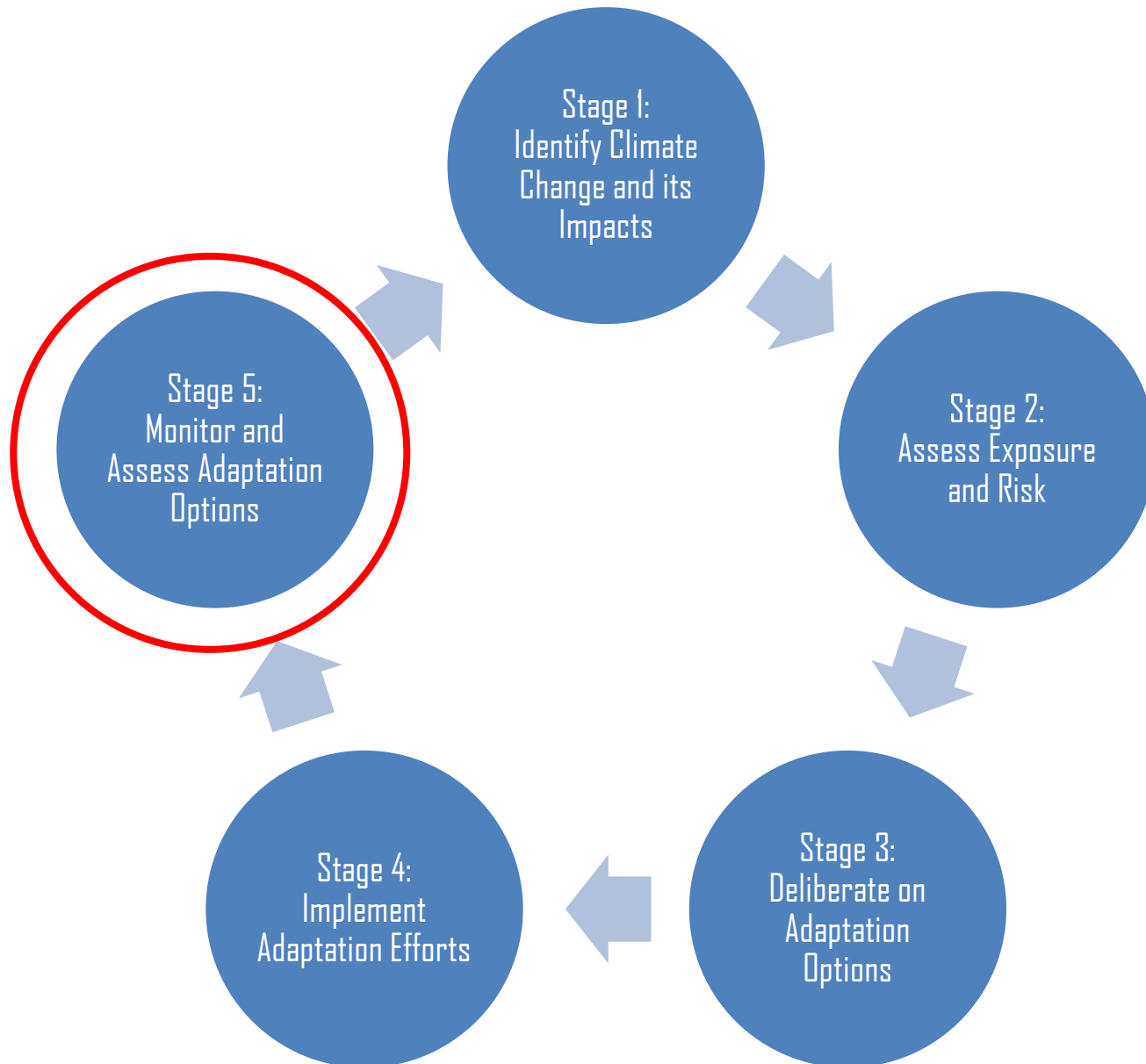
Asia-Pacific Climate Change Adaptation Platform

Announced at COP22

- **Asia Pacific Adaptation Information Platform** will be established by 2020 to share **climate risk information** via online with research institutes/universities in both developing/developed countries.
- To support adaptation measures by providing advanced scientific climate risk information
- Japan will take a lead in the following activities under the Platform
 - ① **Develop dataset** on **projection of climate change impacts** in the region through bilateral & intensive studies
 - ② **Develop supporting toolkits** for officials and stakeholders engaged in adaptation planning
 - ③ **Build capacity** on climate change **impact assessment/ adaptation planning**



Approach to Climate Change Impacts/Adaptations



Presenters in the Session PS1-2B

1. Dr. Kei Gomi, NIES, Japan
Spatial Low Carbon Modeling for Urban Development: Japan Experience
2. [Canceled] Ms. Sri Tantri, KLHK, Indonesia
Lesson Learnt: Monitoring Impact of Adaptation Program in Indonesia using SIDIK
3. Dr. Seiya Maki, NIES, Japan
Expanding Methodology Plan by Using Data Fusion Method
4. Dr. Retno Gumilang Dewi, ITB, Indonesia
Challenges for Developing Effective MRV System for Industrial/Energy Sector
5. Mr. Bregas Budianto, IPB, Indonesia
Monitoring System for Green Campus

Each Presenter has 15 min presentation