

# Promoting Adaptation Business

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# Potential Market size of Adaptation Business

**Potential market scale of adaptation business reaches maximum US\$500 billion annually in 2050.**

**UNEP** (United Nations Environment Programme) estimates\*1 **the cost of adaptation measures** under the situation where “rise in temperature is controlled to be 2 degrees Celsius from the pre-Industrial Revolution level” to be US\$140-300 billion annually between 2025-2030, and **USD\$280-500 billion annually between 2030-2050.**

**Global scale of adaptation and resilience products and services by private companies reaches approximately £ 68.7 billion annually.**

The British Government’s research estimates \*2 **worldwide sale of adaptation and resilience products and services to grow by 7.1% in 2015-2016** compared to level of 2010-2011.

\*1 UNEP “The Adaptation Finance Gap Report 2016”

<http://web.unep.org/adaptationgapreport/sites/unep.org.adaptationgapreport/files/documents/agr2016.pdf>

\*2 UK Department for Business Innovation and Skills “Adaptation and Resilience (Climate Change) (A&RCC) 2011/12, July 2013” <https://www.gov.uk/search?q=Adaptation+and+resilience+climate+change+A%26RCC>

# METI's Activities

## ~Framework for Promoting Adaptation Business through Public-Private Cooperation~

### Task 1

Even with the high potential, due to lack of awareness of adaptation business, only few human resources capable to link adaptation to expand business.

### Task 2

Despite significant demand, knowledge and awareness of adaptation measures and technology is low in many countries, and thus, demand remains unattended.

### Task 3

There are successful cases of Japanese adaptation business, but support for continuous expansion is not established.

### Solution 1

#### Human Development

Good Practice Cases

Business Guide books

### Solution 2

#### Dissemination & Awareness

International events

Domestic Seminars, consultations

### Solution 3

#### Creating & expanding business




Feasibility Studies

Linkage with funding schemes






Visualizing benefits

Incentives

# Good Practices by Private Sector ①

	Area	Project outline	Countries	Company
	1 Resilient Infrastructure / Climate Monitoring & Early Warning	Establishment of a disaster-resilient transport infrastructure through monitoring system and early warning system bundled with geomorphic analysis technologies .	Vietnam	Kawasaki Geological Engineering Co., Ltd.
	2 Resilient Infrastructure / Climate Monitoring & Early Warning	Reduce potential risks associated with natural disasters for a potential construction site via Shimizu Global Hazard Evaluation System.	Indonesia	Shimizu Corporation
	3 Resilient Infrastructure	Protect community from a threat of sea level rise by building permanent concrete seawall including wave control structures.	Maldives	Taisei Corporation
	4 Sustainable Energy Supply	Supply stable electricity by introducing a resilient hybrid power generation control system using solar power, power storage system and energy management system.	Indonesia	Kyudenko Corporation
	5 Sustainable Energy Supply	Provide local community with access to electricity in times of major disasters by introduction of portable solar lighting system	Myanmar, Indonesia, Kenya, Ethiopia	Panasonic Corporation
	6 Food Security & Agriculture	Improve the quality of agricultural produce through the operation of its resource-recycling production model “Bio-cycle”.	Brazil, Thailand	Ajinomoto Co., Inc.
	7 Food Security & Agriculture	Enhance agricultural sustainability and productivity .Introduce high quality cacao agroforestry and build capacity of local farmers to	Indonesia	Dari K Co., Ltd.
	8 Food Security & Agriculture	Production of high quality green beans in salt-damages regions by introducing agricultural technology based on appropriate harvest management.	Bangladesh	euglena Co.,Ltd.
	9 Food Security & Agriculture / Health & Sanitation	Circular business model development through flood prevention and ecosystem protection by organic plantation	Cambodia	from far east inc
	10 Food Security & Agriculture	Establishment of an organic fertilizer supply system by producing high-quality compost processed from household rubbish and agricultural waste materials.	Sri Lanka	Kawashima Co.,Ltd

# Good Practices by Private Sector ②

		Area	Project outline	Countries	Company
	11	Food Security & Agriculture	Transforming desert and devastated land into farmland through tube-shaped plant-based polylactic acid fiber "Roll Planter".	South Africa	Toray Industries, Inc.
	12	Health & Sanitation / Food Security & Agriculture	Provide soap-based fire extinguishing foam to protect forest by reducing smoke damage caused by repeated wildfire.	Indonesia	Shabondama Soap Co., Ltd.
	13	Health & Sanitation	Provide insecticide-treated mosquito net to reduce the prevalence of infectious disease.	Tanzania, Kenya, parts of Asia	Sumitomo Chemical Co., Ltd.
	14	Climate Monitoring & Early Warning	Install water leak detection system and undertake water demand projection system to reduce damages from floods, etc.	Thailand	NEC Corporation
	15	Climate Monitoring & Early Warning / Food Security & Agriculture	Responding to climate change by providing big data	Myanmar	Remote Sensing Technology Center of Japan
	16	Secure Resources & Sustainable Water Supply / Health & Sanitation	Ensure stable supply of water suitable for agriculture and drinking by its electro dialysis purification system.	China	Asahi Glass Co., Ltd.
	17	Secure Resources & Sustainable Water Supply / Health & Sanitation	Prevention of water disaster by user friendly water quality inspection kit	China, Vietnam	OPTEX Company, Limited FUJITSU LIMITED
	18	Secure Resources & Sustainable Water Supply	Prevention of flood at heavy rain while ensuring stable water supply at scarce rain by a rainwater storage system "CROSS-WAVE".	China, India	SEKISUI CHEMICAL CO.,LTD.
	19	Secure Resources & Sustainable Water Supply	Install clean water supply system featuring slow sand filtration method to reduce risk brought by water contamination.	Indonesia, Senegal	Yamaha Motor Co., Ltd.
	20	Climate Change Finance	Introduce weather index insurance to minimize financial losses caused by extreme weather events.	Thailand, Myanmar	Sompo Japan Nipponkowa Insurance Inc.

## List of Adaptation Feasibility Studies (FY2017)

Implementing company	Project Name	Target Country
SAKA NO TOCHU Co., Ltd.	Agro-forestry promotion project to reinforce resilience against climate change and improve the livelihood in rural areas of Lao PDR (Mekong Organic Project)	Lao PDR
ERM Japan Ltd.	Feasibility study on adaptation business development by introducing groundwater purification system in India	India
Sompo Risk Management & Health Care Inc.	Weather index insurance project for farmers	Myanmar
Challenergy Inc.	Feasibility study on reinforcing resilience of power and communication infrastructure utilizing wind power and satellite communication adaptable to increasing climate change related disasters accompanied by climate change	Philippines
Sunford Co., Ltd.	Forest Restoration Project (reforestation activities to increase resilience of agricultural land and utilizing the crop to produce organic textile to develop local industry)	Cambodia

# International & Domestic Seminars

## Asia-Pacific Climate Change Adaptation Forum (2016/10, Sri Lanka)



## COP22 Side Event (2016/11, Morocco)



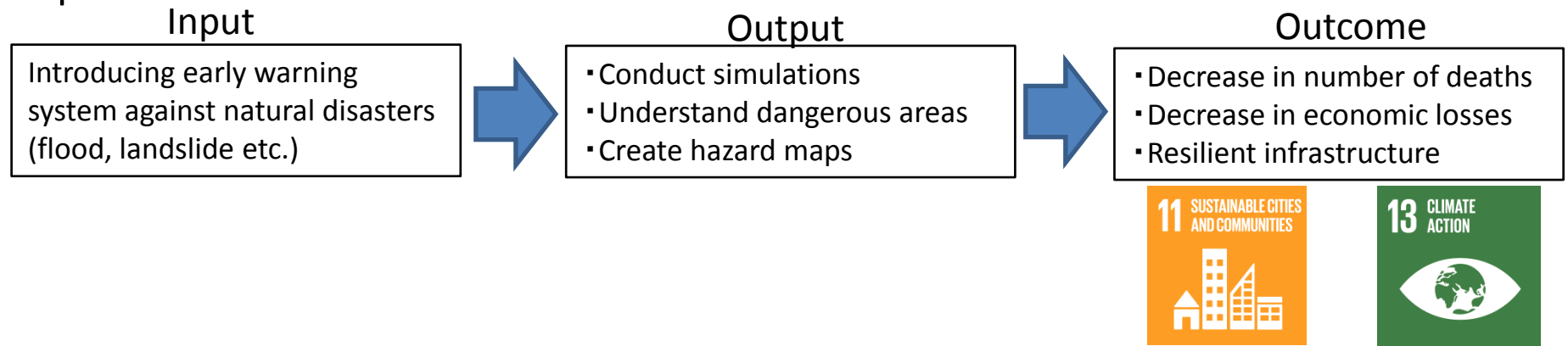
## Domestic Seminar (2017/2)



# Visualizing Benefits ~Linkage with SDGs~



<Example>





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