

Regional NAP EXPO for Asia

Seoul, Republic of Korea, 11 to 12 September 2017

Day2 Session VII.C - Examples of the process and results monitoring relating to the process to formulate and implement NAP

「Adapting to the Changing Climate」

# 2<sup>nd</sup> NAP Monitoring and Evaluation Mechanism of Korea

Korea Adaptation Center for Climate Change (KACCC)  
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Intro

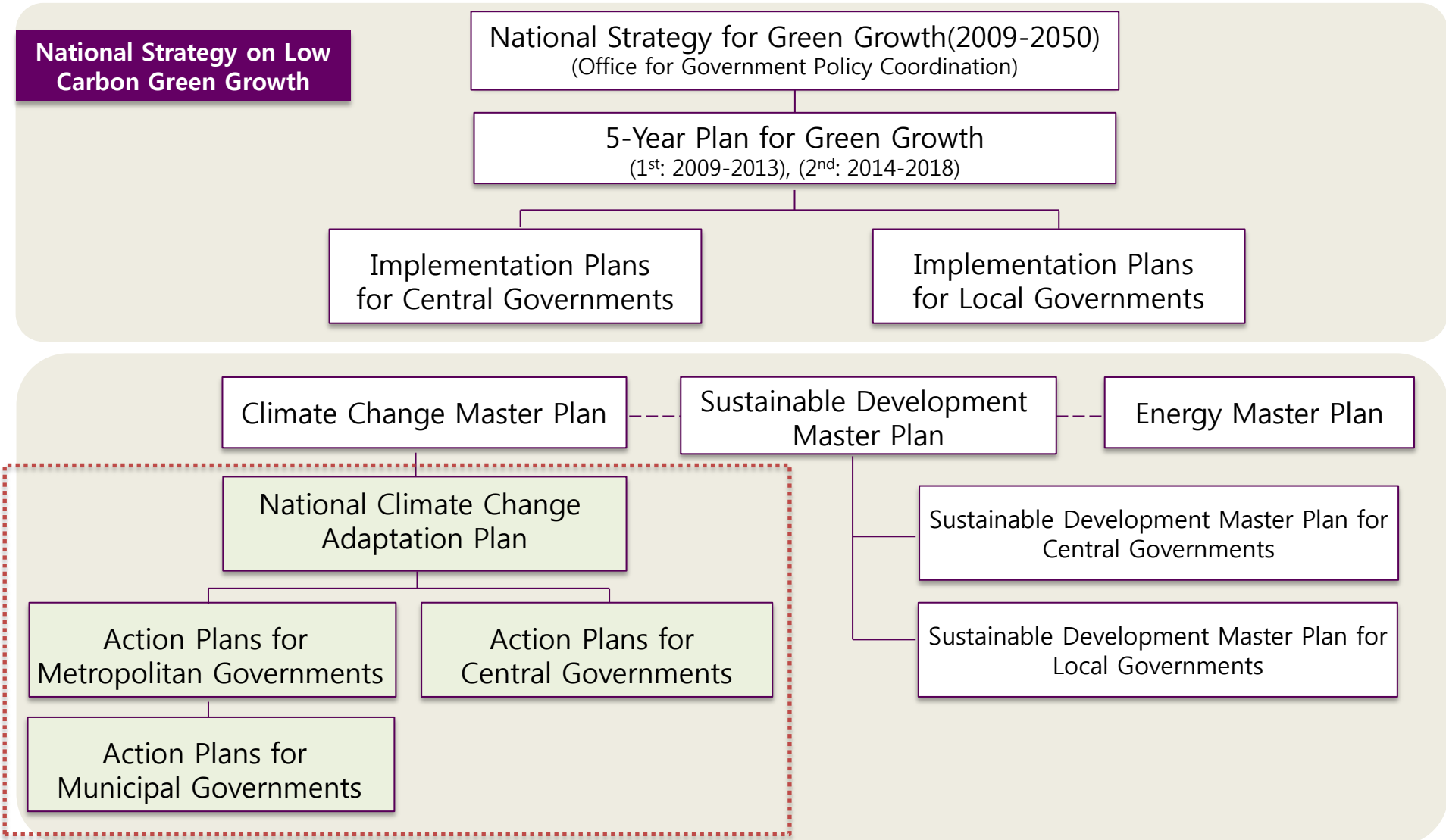
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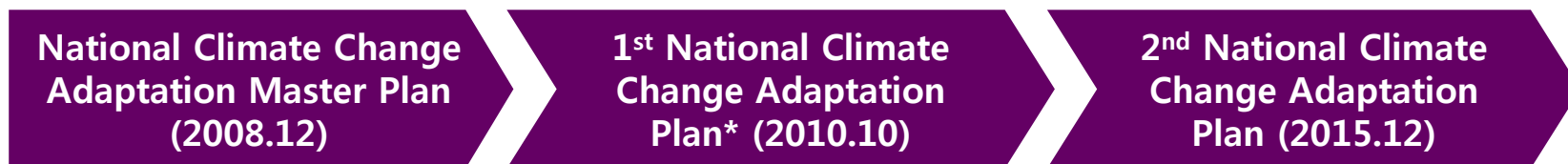
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# I. Intro \_1. Legal Framework for Adaptation

- Framework Act on Low Carbon Green Growth (April, 2010)



# I. Intro\_ 2. Progress on NAP



Vision	To build safe society and support green growth through climate change adaptation					
Periods	2009-2030 (22years)	2011-2015 (5years)	2016-2020 (5years)			
Implementing Ministries	13 ministries		20 ministries			
Features	<p style="text-align: center;"><b>&lt;Key Changes&gt;</b></p> <ul style="list-style-type: none"> <li>• The first nation-wide official master plan for responding to climate change</li> <li>• Suggest a national vision and directions toward adaptation policy</li> <li>• Key action plan for low-carbon green growth, which is the national long-term vision</li> <li>• Develop key indicators for climate change adaptation</li> </ul> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> <li>• Suggest an adaptation plan to achieve a long-term vision</li> <li>• Limited to the effects for climate change adaptation</li> <li>• Prepare a plan based on existing adaptation issues</li> <li>• Regular monitoring of the implementation status</li> </ul> </td> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> <li>→</li> <li>→</li> <li>→</li> <li>→</li> </ul> </td> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> <li>• Differentiate mid and long-term goals for climate change adaptation at the national level</li> <li>• Aim at creating co-benefits of mitigation and adaptation</li> <li>• Harness science-based approach with impact and risk assessment of climate change</li> <li>• Enhance monitoring on climate change impact and integrated performance assessment</li> </ul> </td> </tr> </table>			<ul style="list-style-type: none"> <li>• Suggest an adaptation plan to achieve a long-term vision</li> <li>• Limited to the effects for climate change adaptation</li> <li>• Prepare a plan based on existing adaptation issues</li> <li>• Regular monitoring of the implementation status</li> </ul>	<ul style="list-style-type: none"> <li>→</li> <li>→</li> <li>→</li> <li>→</li> </ul>	<ul style="list-style-type: none"> <li>• Differentiate mid and long-term goals for climate change adaptation at the national level</li> <li>• Aim at creating co-benefits of mitigation and adaptation</li> <li>• Harness science-based approach with impact and risk assessment of climate change</li> <li>• Enhance monitoring on climate change impact and integrated performance assessment</li> </ul>
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\* In December 2012, the 1<sup>st</sup> National Climate Change Adaptation Plan was revised based on impact analysis with Representative Concentration Pathways (RCP) scenario, which is used in the 5th IPCC Assessment Report.

# I. Intro\_ 2. Progress on NAP

## The structure of 2<sup>nd</sup> NAP

<b>Vision</b>	Pathways towards Safe and Happy Society for the Public through Climate Change Adaptation				
<b>Goal</b>	Climate Change Risk Reduction and Opportunity Realization				
<b>Principles</b>	Sustainable Development	Climate Resilience for the Vulnerable	 Science-based Measures	Integrated Approach	Active Public Participation
<b>Policy Sector</b>	Science-Based Risk Assessment	<ul style="list-style-type: none"> <li>Establishing monitoring &amp; prediction system on climate change</li> <li>Developing Korean climate scenario</li> <li>Monitoring on climate impact</li> </ul>	<ul style="list-style-type: none"> <li>Conducting vulnerability assessment &amp; risk assessment</li> <li>Providing integrated information system</li> </ul>		
	Building a Safe Society	<ul style="list-style-type: none"> <li>Reporting the vulnerable to the climate change</li> <li>Preventing and controlling public health threat</li> </ul>	<ul style="list-style-type: none"> <li>Managing the vulnerable areas and facilities</li> <li>Responding to climate disaster</li> </ul>		
	Strengthening Competitiveness of the Industrial Sector	<ul style="list-style-type: none"> <li>Enhancing adaptive capacity in industrial sectors</li> <li>Building a foundation of adaptation infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Developing climate change adaptation technologies</li> <li>Supporting Foreign Market Entry</li> </ul>		
	Sustainable Natural Resources Management	<ul style="list-style-type: none"> <li>Securing biodiversity</li> <li>Managing climate change risk for ecosystem</li> </ul>	<ul style="list-style-type: none"> <li>Restoring ecosystem and managing habitats</li> </ul>		
<b>Implementing Basis</b>	Building an Internal/External Implementing Basis	<ul style="list-style-type: none"> <li>Strengthening effectiveness of adaptation policies</li> <li>Promoting local-level adaptation activities</li> </ul>	<ul style="list-style-type: none"> <li>Enhancing international cooperation</li> <li>Promoting public relations and education on adaptation</li> </ul>		

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## NAP M&E System of Korea

## II. NAP M&E system

### 1. Legal basis

「Enforcement decree of the framework act on low carbon, green growth」

#### Article 38

#### Establishment, Implementation, etc. of Measures for Adaptation to Climate Change

(3) In order **to confirm the appropriateness, etc. of the execution of a detailed implementation plan under paragraph (2), the Minister of Environment may check the results of such detailed implementation plan** with the head of each related central administrative agency, each Mayor/Do Governor and the head of each Si/Gun/Gu every year.

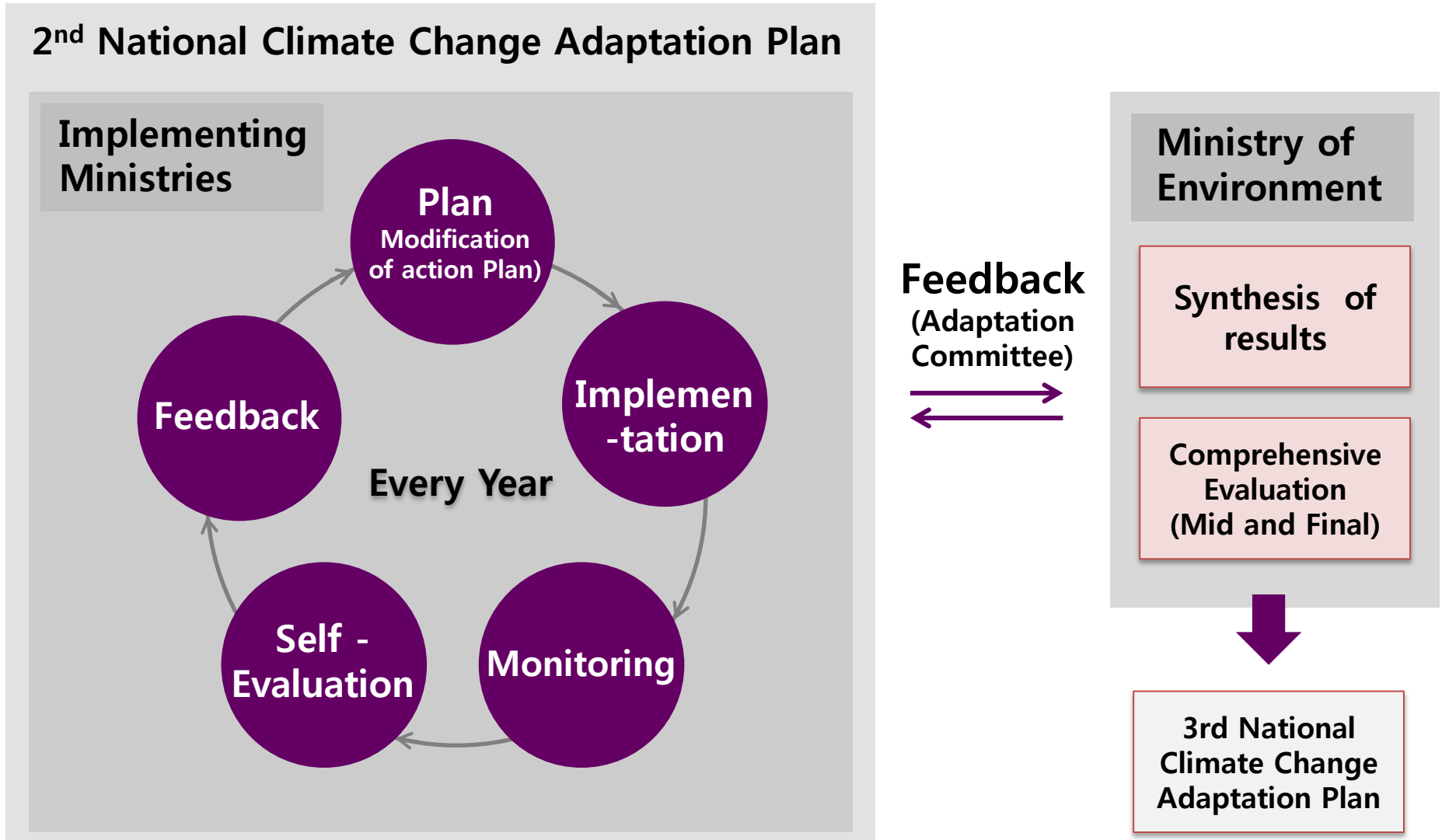
(4) **The Minister of Environment may organize and operate a consultative body comprised of public officials** belonging to the Senior Executive Service of related central administrative agencies for the formulation and execution of measures for adaptation to climate change under paragraph (1) and **a detailed implementation plan under paragraph (2).**

(5) Where the Minister of Environment **deems it necessary to formulate and execute a detailed implementation plan** under paragraph (2) and **to check the results** under paragraph (3), he/she **may request** the heads of related central administrative agencies, Mayors/Do Governors and the heads of Sis/Guns/Gus **to submit necessary data.**



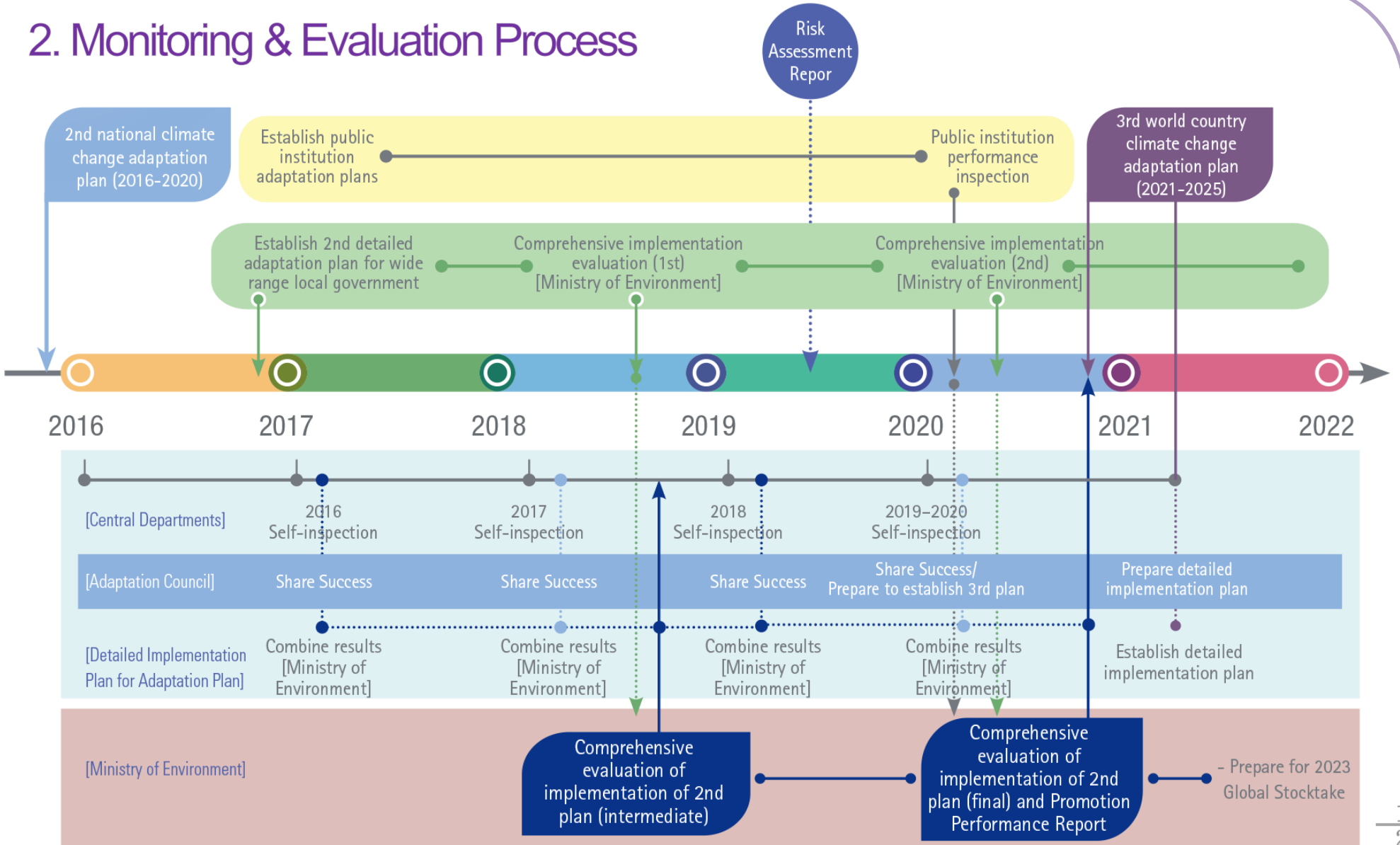
# II. NAP M&E system

## 2. Monitoring & Evaluation Process



# II. NAP M&E system

## 2. Monitoring & Evaluation Process



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NAP 1<sup>st</sup> M&E Results

# III. NAP 1<sup>st</sup> M&E results

## 1. Overview

- **(Objective)** Strengthening effectiveness of the plans and increasing the responsibility of the implementing ministries by evaluating and circulating the implementation results of climate change adaptation action plan
- **(Legal Basis)** 「 Enforcement decree of the framework act on low carbon, green growth 」  
Article 38 - (3)
- **(Target)** 341 Detailed Actions and 100 Critical Actions
  - Total 341 projects implemented by 19 Central Governments in 2016 ‘1-1-1-1’ & ‘1-1-1-1-가’ project level
  - (Critical Action) Total 100 critical actions plans selected out of 341 detailed action plans, linking with 2<sup>nd</sup> National Adaptation Plans
- **(Method)** Integrated evaluation based on self-evaluation conducted by implementing ministries
  - (Detailed Action Plans) checking on the levels of implementation and achievement of the plans as ‘Well-implemented/ Delayed / Not-implemented’
  - (Critical Action Plans) Evaluating the levels of implementation, cooperation & public reach, and effectiveness as ‘Excellent/Fair/Poor’

# III. NAP 1<sup>st</sup> M&E results

## 1. Overview – Evaluation Criteria

- All the 341 projects : **Well-implemented**  
**/Delayed/Not implemented**

Indicator	Method
1) Level of implementation	· the level of implementation ⇒ level of budget executed =executed/planned budget (%) 90% ~ 100% (High), 70% ~ 89% (Mid), 70%~ (Low)
2) Level of achievement	· the level of achievement = processed/planned activities (%) 100% (High), 80% ~ 99% (Mid), 80%~ (Low)
3) Main result and future plans	· presenting the main result and effectiveness of the result · suggesting alternatives for under-implemented result

- 100 critical projects : **Excellent/Fair/Poor**

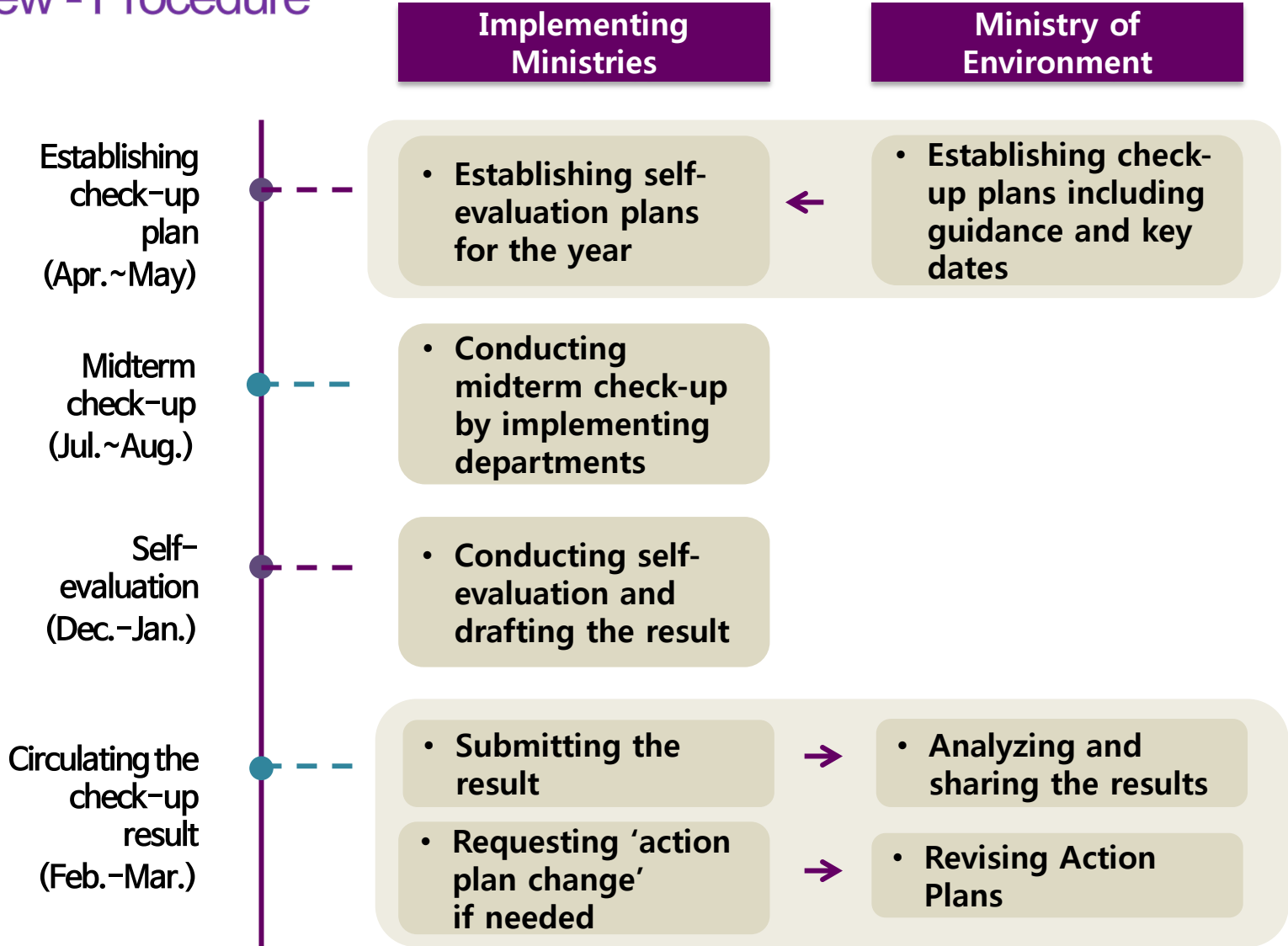
Indicator	Method
1) Level of implementation	·Whether the project is implemented as planned in budget and time ·Whether the project is implemented to meet the level of achievement as planned
2) Level of cooperation and public reach	·Interaction and cooperation among implementing ministries for sharing information, reaching public, and education
3) Effectiveness of the plans	·Any performance that can not be measured by indicators

- Synthesis Result framework matrix

Implementation \ Achievement	High	Mid	Low
High	Well-implemented	Well-implemented	Delayed
Mid	Well-implemented	Delayed	Delayed
Low	Delayed	Delayed	Not implemented


# III. NAP 1st M&E results

## 1. Overview - Procedure



# III. NAP 1<sup>st</sup> M&E results

## 2. Progress for the year

- 
- '17.02.10
    - Established evaluation plans for the central governmental action plans
    - Requested submission of the self-evaluation (MOE→Implementing ministries)
  - '17.05.19
    - Submitted the self-evaluation (Implementing ministries→MOE)
  - '17.06.05
    - Re-submitted the revised self-evaluation (Implementing ministries→MOE)
  - '17.06.16
    - Circulated the integrated results (MOE → Implementing ministries)
  - '17.06.20
    - Analyzed the implementation performance (MOE, KACCC)
  - '17.06.29
    - Shared the results in the climate change adaptation working group meeting
  - '17.08.08
    - Submitted alternatives or future plans for the delayed projects (Implementing ministries→MOE)

# III. NAP 1st M&E results

## 3. M&E on Action Plans – Action Plan and Indicators

I-1-1-1 동아시아-한반도 기후변화 및 기후변화 연계 대기환경 감시체계 구축									
가 한반도 기후변화 감시정보 통합 공유 및 활용 체계 구축			기상청 (기후변화감시과)	'16~'20					
기상청	소속부서	기후변화감시과	전화번호	02-2181-0642					
	성명(직급)	이철규(기상연구관)	이메일	chulkyu.lee@korea.kr					
⋮									
<b>6. 소요예산</b>									
부처명 (과)	세부과제명	구분	그간 투자액 ( '11~'15)	예산계획('16~'20) (단위 : 억원)					
				총계	'16	'17	'18	'19	'20
기상청 (기후변화 감시과)	한반도 기후변화감시정보 통합 공유 및 활용 체계 구축	합계	1	21	3	4	4	5	5
		국고	1	21	3	4	4	5	5
		지방비	-	-	-	-	-	-	-
		기타 (민간 등)	-	-	-	-	-	-	-
<b>7. 성과목표</b>									
구분	지표명	단위	현재 수준	목표수준					
기상청	KALION 관련 워크숍, 캠페인 등 활동 횟수	회	3	'16	'17	'18	'19	'20	
				3	3	4	4	4	
※ 현재 기준년도 : 2015년									

- Name of the project, implementing ministry & period

- Budget planned over five years as an indicator

- Performance indicator and target-setting



# III. NAP 1st M&E results

	High	Mid	Low
High	Synthesis Result		
Mid			
Low			

## 3. M&E on Action Plans – Self-Evaluation and Check up for 2016

제2차 국가기후변화적응대책 세부시행계획의 목표				1. 이행집행 노력				2-1 목표달성 노력(정량지표)				2-2 목표달성 노력(정성지표)				3. 주요실적 및 향후 계획		증빙자료(근거)	종합결과
과제명	관계부	세부부서	종합집수 기준	예산 집행률			이행집행 노력 종합 점수	목표 달성 노력				정치·제도적 목표				세부내용	계획 및 결과보고 문서 연구보통기계	평가	비고
				계획	실적	예산		목표 달성률 (%)	목표 달성률 (%)	지표명	진척률 (%)	목표 달성률 (%)							
민중감시예측체계 구축			우수 (90%~100%)																
기후변화 및 기후변화 연계 대기환경 감시체계 구축			우수 (90%~100%)																
탄반도 기후변화감시정보 통합 공유 및 활용 체계 구축	기상청	(기)기후변화감시과	보통 (70%~89%)	구분	3	2.9	96.7												
	기상청	(기)기후변화감시과	미흡 (70%미만)	국비	3	2.9													
	기상청	(기)기후변화감시과	우수 (90%~100%)					우수 (100%)											
기상-해양-환경 상시관측 정지레도 복합위성 개발	기상청	(기)기후변화감시과	정상추진					우수 (90%~100%)											
	환경부	(환경)국립환경과학원	지연					우수 (90%~100%)											
	환경부	(환경)국립환경과학원	미추진					우수 (90%~100%)											
	환경부	(환경)국립환경과학원	지연					우수 (90%~100%)											
기상-해양-환경 상시관측 정지레도 복합위성 개발	기상청	(기)위성분석과	보통 (80%이상~99%)	구분	671	671	100.0												
	기상청	(기)위성분석과	미흡 (80%미만)	국비	671	671													
	기상청	(기)위성분석과	우수 (90%~100%)					우수 (90%~100%)											
기상-해양-환경 상시관측 정지레도 복합위성 개발	기상청	(기)위성분석과	보통 (80%이상~99%)	구분	671	671	100.0												
	기상청	(기)위성분석과	미흡 (80%미만)	국비	671	671													
	기상청	(기)위성분석과	우수 (90%~100%)					우수 (90%~100%)											
기상-해양-환경 상시관측 정지레도 복합위성 개발	기상청	(기)위성분석과	보통 (80%이상~99%)	구분	671	671	100.0												
	기상청	(기)위성분석과	미흡 (80%미만)	국비	671	671													
	기상청	(기)위성분석과	우수 (90%~100%)					우수 (90%~100%)											
기상-해양-환경 상시관측 정지레도 복합위성 개발	기상청	(기)위성분석과	보통 (80%이상~99%)	구분	671	671	100.0												
	기상청	(기)위성분석과	미흡 (80%미만)	국비	671	671													
	기상청	(기)위성분석과	우수 (90%~100%)					우수 (90%~100%)											
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	기상청	(기)위성분석과	우수 (90%~100%)					우수 (90%~100%)											
기상-해양-환경 상시관측 정지레도 복합위성 개발	기상청	(기)위성분석과	보통 (80%이상~99%)	구분	671	671	100.0												
	기상청	(기)위성분석과	미흡 (80%미만)	국비	671	671													
	기상청	(기)위성분석과	우수 (90%~100%)					우수 (90%~100%)											
기상-해양-환경 상시관측 정지레도 복합위성 개발	기상청	(기)위성분석과	보통 (80%이상~99%)	구분	671	671	100.0												
	기상청	(기)위성분석과	미흡 (80%미만)	국비	671	671													
	기상청	(기)위성분석과	우수 (90%~100%)					우수 (90%~100%)											

Budget Execution rate as an Indicator

Performance Indicators

"Level of Implementation"

"Level of Achievement"

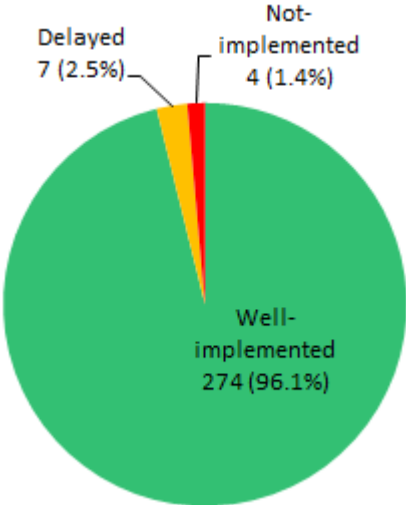
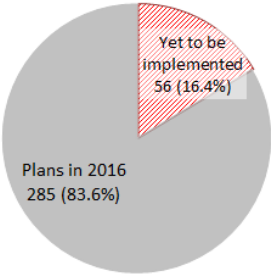
Synthesis Result

# III. NAP 1st M&E results

## 3. M&E on Action Plans – Result

### 341 Detailed Actions

- **(Target Project)** 285 Projects(83.6%) are subject to checking on self-evaluation  
2016 out of total 341 projects (the rest of the projects are yet to be implemented)
- **(Results)** 274 Well-implemented(96.1%), 7 delayed(2.5%), 4 Not-implemented(1.4%)
  - Delayed : Due to the low level of budget execution and external reasons
  - Not-implemented: Due to budget not executed(1) and deterioration of the inter-Korea relations(3)



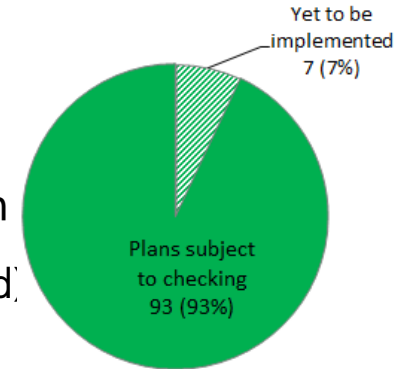
	Total	Yet to be implemented	The implementation result of the plans in 2016			
			Sub-total	Well-implemented	Delayed	Not-implemented
Projects	341	56	285	274	7	4
rate(%)	100.0	16.4	100.0	96.1	2.5	1.4
Budget (bn₩)	84,08.84	-	8,408.84	8,317.9	90.86	-
rate(%)	100.0	-	100.0	98.9	1.1	-

# III. NAP 1<sup>st</sup> M&E results

## 3. M&E on Action Plans – Result

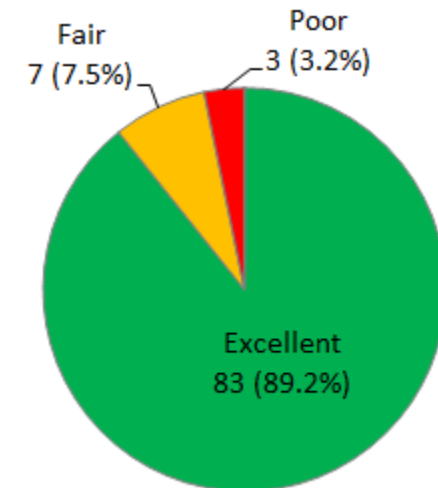
### 100 Critical Actions

- **(Target Projects)** 93 Projects are subject to checking on self-evaluation in 2016 out of total 100 projects (the rest of the projects are yet to be implemented)



- **(Results)** 83 Excellent(89.2%), 7 Fair(2.5%), 3 Poor(3.2%)
  - Fair : Budget execution and Project delayed due to external reasons
  - Poor: Due to budget not executed and deterioration of the inter-Korea relations

	The implementation result in 2016			Yet to be implemented	Total
	Excellent	Fair	Poor		
Projects	83	7	3	7	100
Rate(%)	83.0	7.0	3.0	7.0	100.0
Budget(bn₩)	4,535.88	501.78	0.42	-	5,038.08
Rate(%)	90.0	9.9	0.1	-	100.0



# III. NAP 1<sup>st</sup> M&E results

## 4. Sharing the results

### Climate Change Adaptation Working Group Meeting (Jun.29<sup>th</sup>, 2017, MOE meeting room)

- **(Objective)** Strengthening effectiveness of the plans and increasing the responsibility of the implementing ministries by evaluating and circulating the implementation result of climate change adaptation action plan
- **(Participants)** 23 officials from Central governments
- **(Discussion and Result)**
  - Review on budget execution rate as an indicator
  - Review on introduction of the evaluation system by external expertise
  - Amendment of (Detailed) Action Plans at a certain time
  - The usage of implementation results



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Conclusion

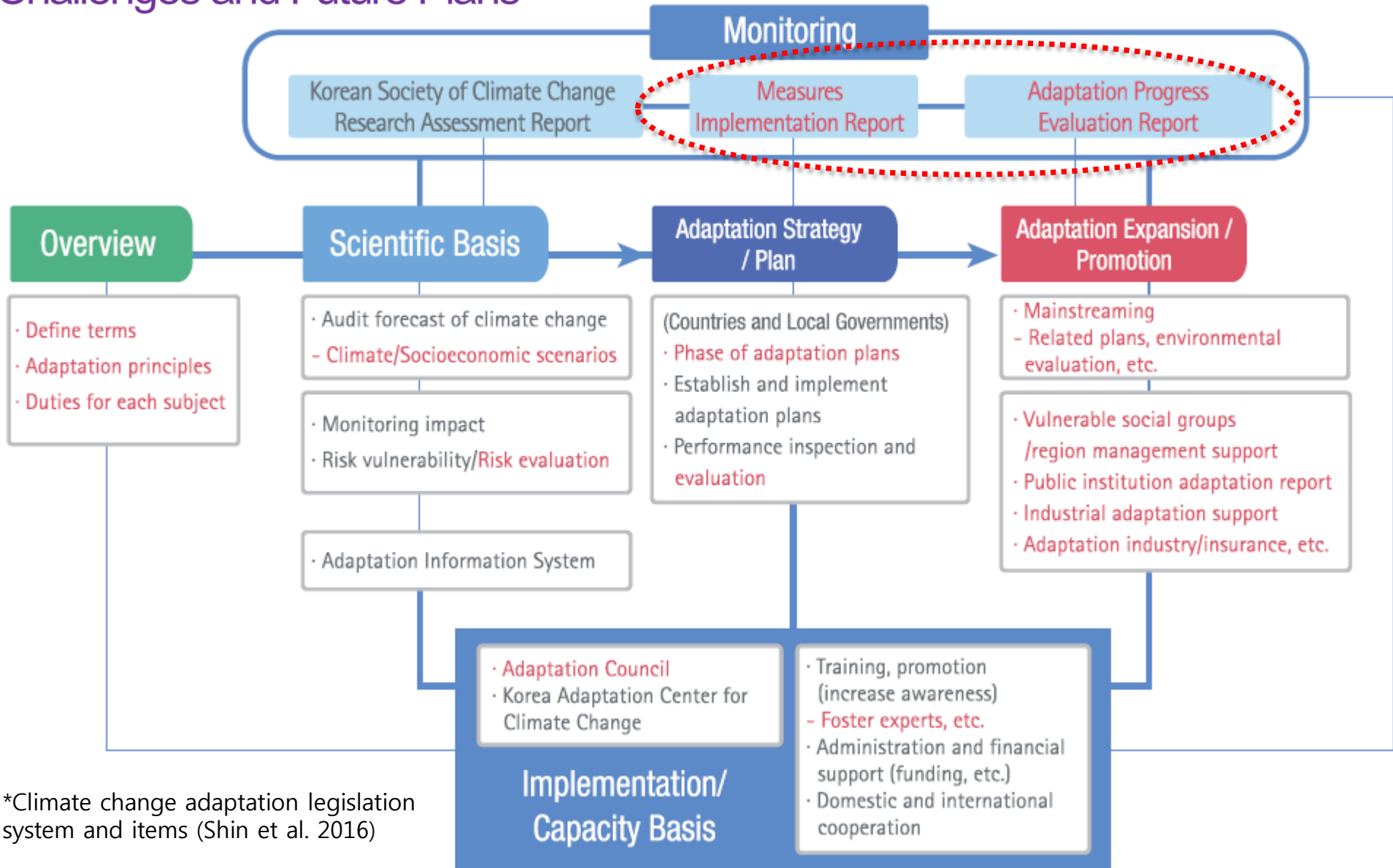
# IV. Conclusion

## Challenges and Future Plans

- Improved the national adaptation capacity through two times of national adaptation planning experiences
- Set up a comprehensive implementation system by establishing sectoral, metropolitan & municipal-level implementation plans
- Reviewing the valuation criteria and evaluation system
  - In what level(Project or Policy direction), budget execution rate as an indicator be measured
  - The need for quantitative method, evaluation system conducted by the external expertise can be considered
- Raising awareness of importance of adaptation actions within the government
- Delivering implementation results and effectiveness of the adaptation policy to the public
- Structure and implementation of 'Monitoring and evaluation' in Korea are also making and ongoing process
- It's consistently needed to share and learn each other with countries already experienced monitoring and evaluation for successful implementation of NAP

# IV. Conclusion

## Challenges and Future Plans



\*Climate change adaptation legislation system and items (Shin et al. 2016)

# Thank you for your attention

[http://ccas.kei.re.kr/english2014/eng2014\\_index.do](http://ccas.kei.re.kr/english2014/eng2014_index.do)



Climate Change Adaptation

Issues Reports

Research & Publication

Network

About Us



## The Korea Adaptation Center for Climate

KACCC was established in July 2009 in response to "Comprehensive Plan on National Climate Change Adaptation (2009~2030)" to engage in strategic research and support climate change adaptation policy. KACCC opened in July 2009 when the center was consigned to the Korea Environment Institute(KEI) by the Ministry of Environment.

This website carries all the products from KACCC, including research reports and plans source book form conferences and workshops, Policy Guidance Briefs and factsheets. Please explore

## News Letter



## Adaptation Network



From 1912 to 2008, the average temperatures of the six major cities in Korea have increased by 1.7a??, which is more than double the global average. In the past century there was a 19% increase in precipitation

## Korea Adaptation Strategy



'National Climate Change Adaptation Master Plan (2011~2015)', which coordinates the efforts of 13 Ministries and 70 experts from various fields was established with the Ministry of Environment

### Sectoral Research

### Sectoral Adaptation Strategy

#### Establishment of Korea Climate Change Adaptation Plan

#### Impacts of Climate Change

#### Support for Climate Change Adaptation Policy

#### (Domestic & International) Climate Change Adaptation Cooperation

#### Integrated Information

#### Relations and Education

↳ KACCC Public Relations, Education

====선택====

## About KACCC



Location



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