



REPUBLIC OF INDONESIA  
MINISTRY OF NATIONAL DEVELOPMENT PLANNING /  
NATIONAL DEVELOPMENT PLANNING AGENCY (BAPPENAS)

# CLIMATE CHANGE INITIATIVES: **TOWARD LOW CARBON DEVELOPMENT**

SYAMSIDAR THAMRIN

---

09/15/2010



# MAINSTREAMING CLIMATE CHANGE INTO NATIONAL DEVELOPMENT AGENDA :

BAPPENAS





BAPPENAS

## INDONESIA: CURRENT EMISSIONS\*



■ LULUCF + Peat burning: 866,254 **+/- Stable** →

■ Energy: 333,540 Gg

■ Industry: 34,197 Gg

■ Agriculture: 75,419 Gg

■ Waste: 151,578 Gg

**Dynamic trend** ↗

**TOTAL: 1,415,988 Gg** \*)Note: these emission numbers for 2004 still under calculation by SNC team



BAPPENAS

**Q:**

WHAT IS THE 'ROADMAP' AND HOW IS IT RELEVANT? WHAT ROLE IS IT PLAYING IN SUPPORTING THE GOI TO TACKLE CLIMATE CHANGE?



BAPPENAS

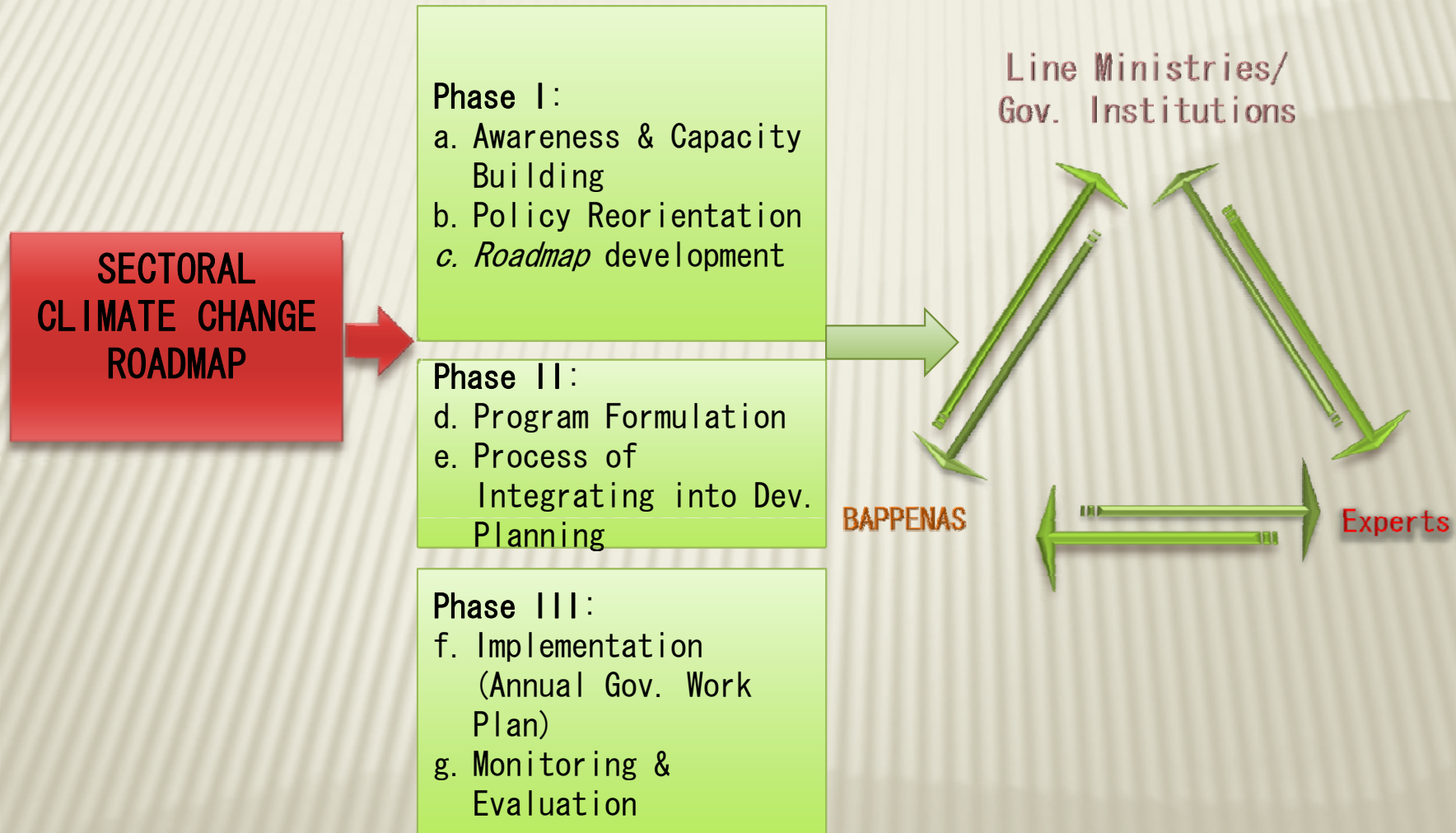
# THE ROADMAP

- ✘ The **Climate Change Sectoral Roadmap** will support the GOI's development vision related to climate change for the next 20 years.
- ✘ The implementation of the Roadmap will be through National Development Plan; the current is for 2010 – 2014.
- ✘ There are nine priority sectors:
  - Mitigation Sectors-:** Energy, Forestry, Industry, Transportation, Waste Management
  - Adaptation Sectors-:** Agriculture, Marine and Fishery, Water Resources, Health



BAPPENAS

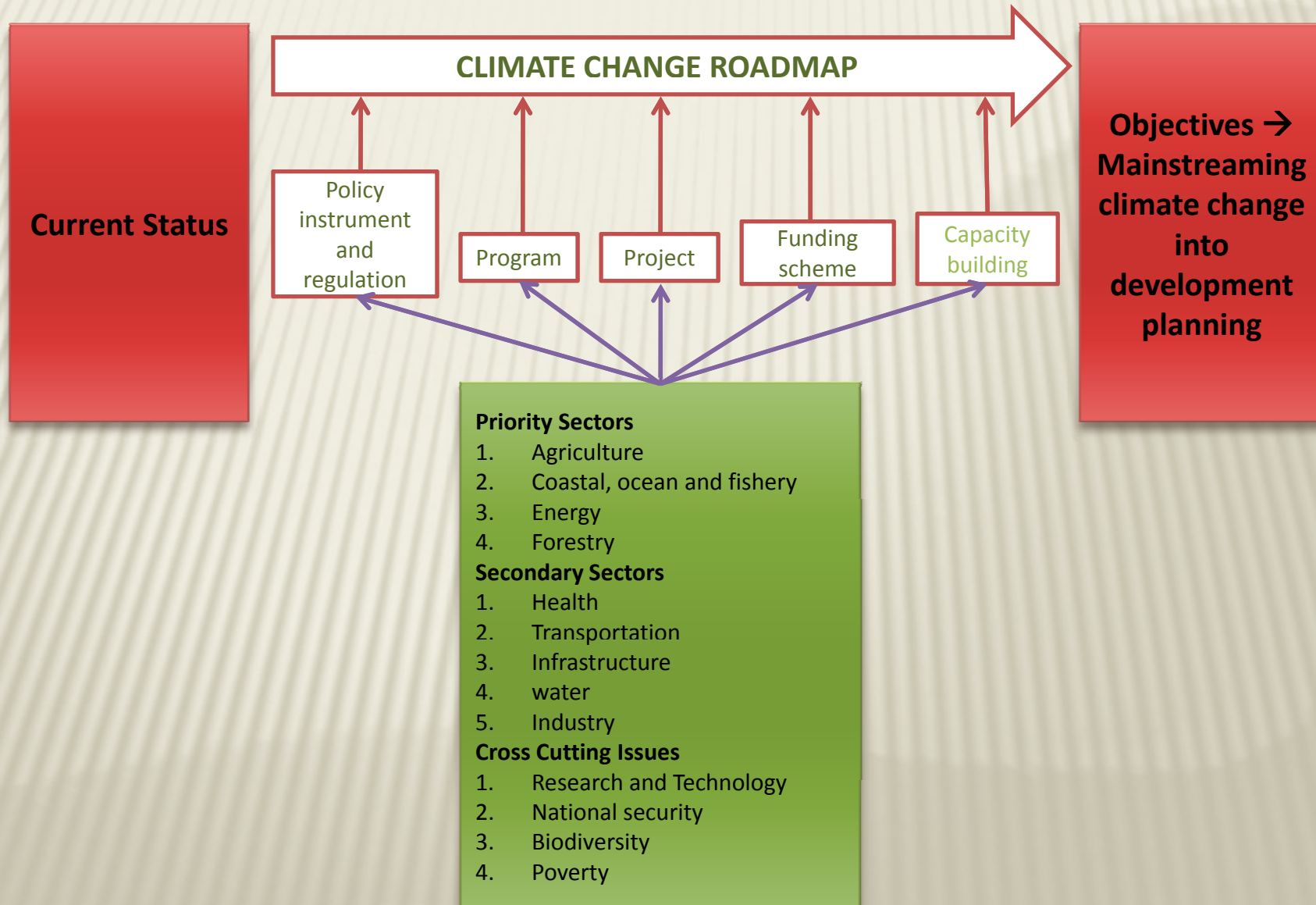
# COORDINATION & IMPLEMENTATION OF SECTORAL CLIMATE CHANGE ROADMAP





BAPPENAS

# Process of CC Roadmap Development





# CLIMATE CHANGE PROGRAMS IN SECTORAL ROADMAP

## Mitigation Programs:

- × **Forestry:** reducing emissions from forest fires and forest degradation especially in peatland areas
- × **Energy:** development and utilization of renewable energy
- × **Transportation:** (a) shifting from individual transport mode to mass-transport systems; (b) development of integrated transport systems
- × **Industry:** energy efficiency and process improvement in manufacture, automotive industry, cement industry, pulp and paper industry
- × **Waste management:** reducing residential solid waste through 3R program (Reduce, Reuse, Recycle)





BAPPENAS

# Process of CC Roadmap Development

## Adaptation Programs:

- × **Agriculture:** policy reforms toward more climate resilience, research to support climate change adaptation, optimizing utilization of water resource and irrigation infrastructures, strengthening buffer stock of food (rice)
- × **Marine and Fishery:** policy reforms to support coastal and small island development, strengthening coastal infrastructures, and capacity building (esp.: fishermen)
- × **Water sector:** improving capacity of dams and water conservation, strengthening local wisdom in water utilization
- × **Health sector:** strengthening health sector capacity to response to climate change and community development



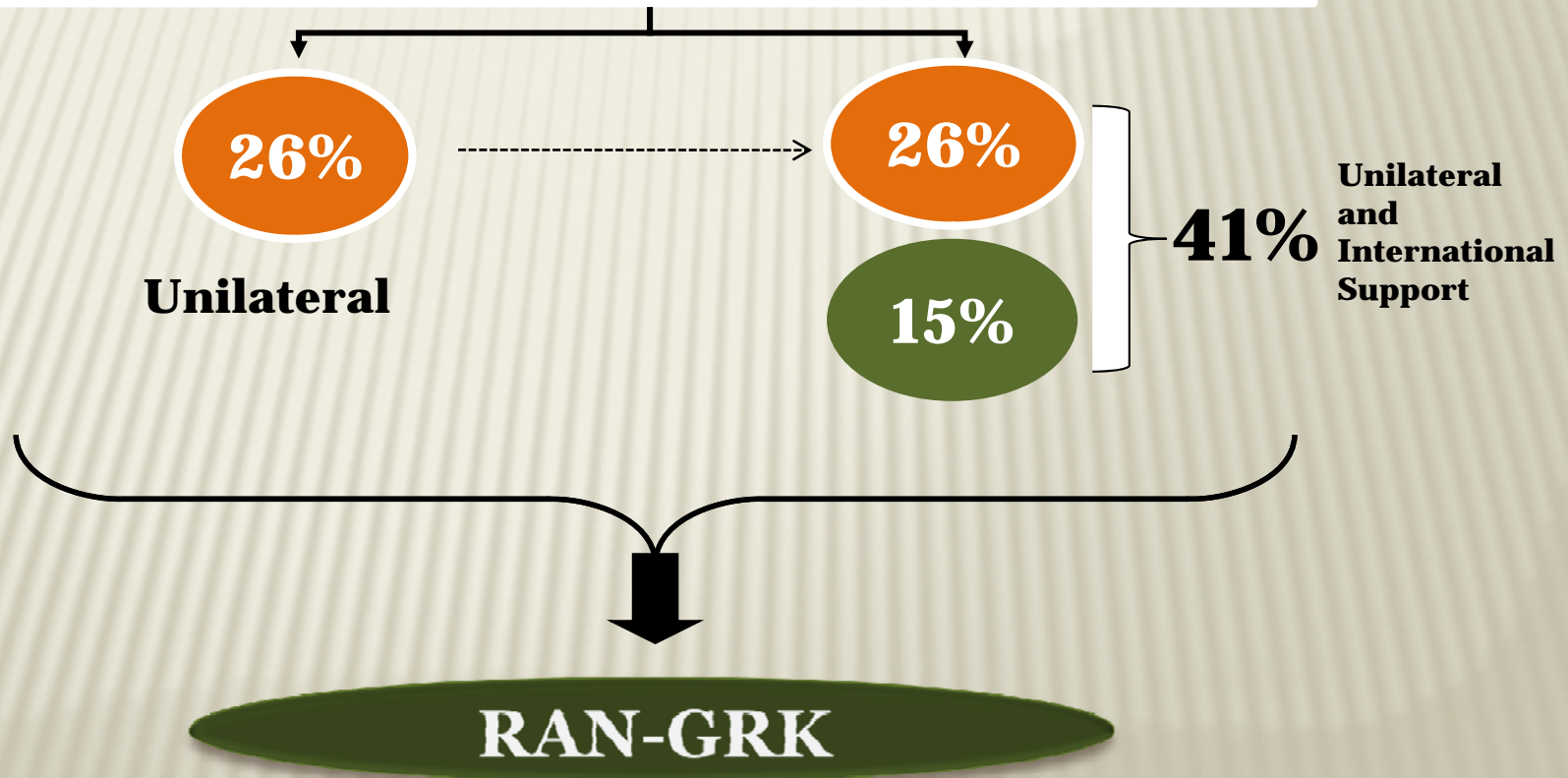
# **NATIONAL ACTION PLAN TO REDUCE GHG EMISSION (RAN-GRK)**



BAPPENAS

# SCENARIO of 2020 GHG Emission Reduction

President Commitment  
G-20 Pittsburgh and COP15  
To reduce to GHG Emission in 2020





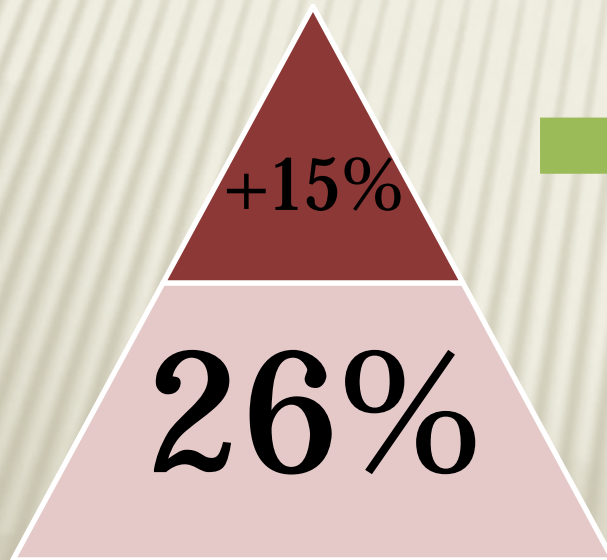
BAPPENAS

# SCENARIO of 2020 GHG Emission Reduction

## RAN-GRK

Compiled based on proposals of actions from Implementing Agencies

Quick start: screened based on existing actions that have co-benefits in reducing GHG emissions



### Criteria:

**Potentially measured, reported and verified (MRV), clear and concise contracts, clear executing agencies, higher abatement cost, not included in CDM project**

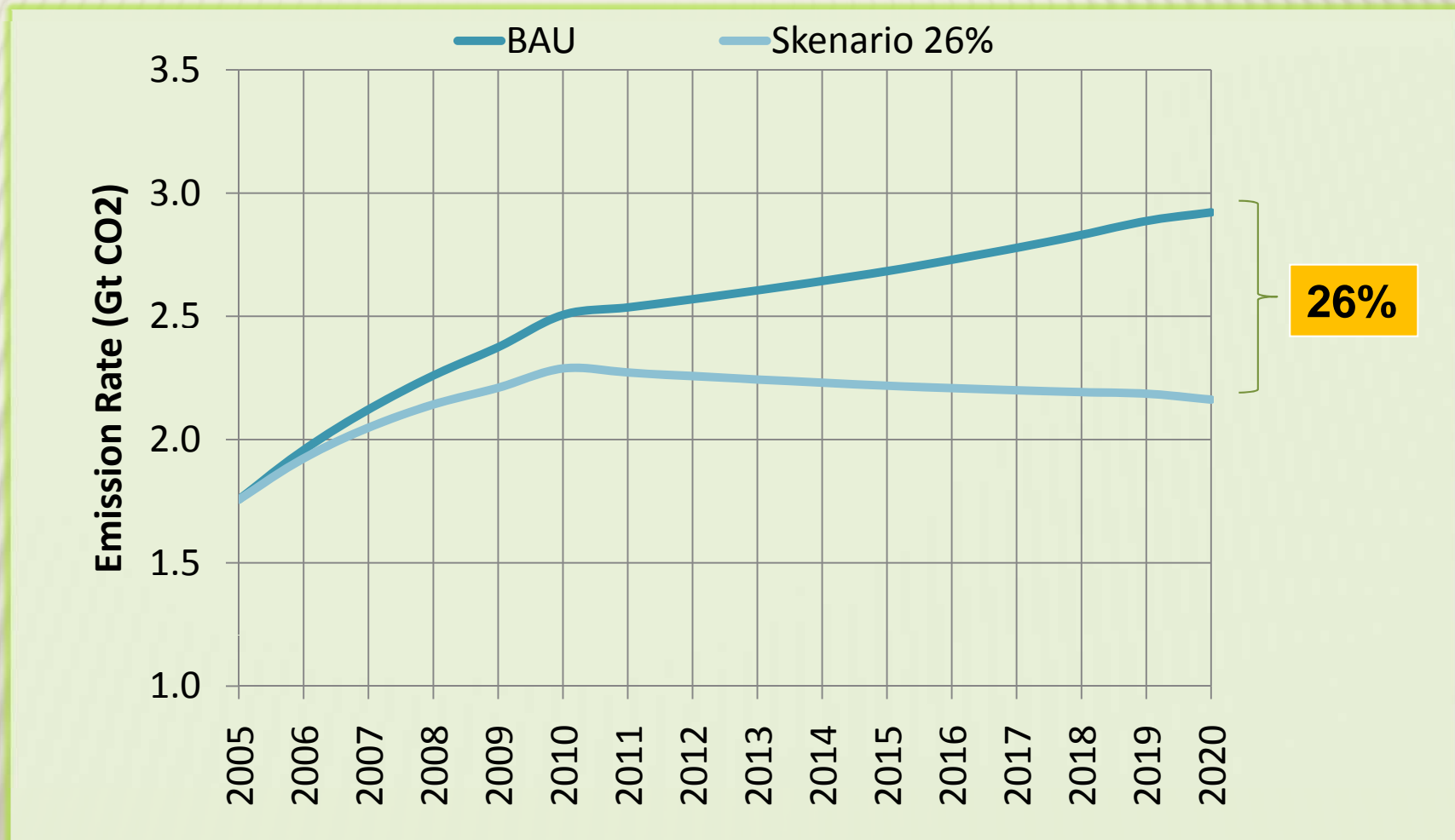
### Criteria:

**Potentially measured, reported and verified (MRV), lower abatement cost, in Medium Term Development Plan, national priorities, economically feasible, not included in CDM project**



BAPPENAS

# SCENARIO of 2020 GHG Emission Reduction





# POLICY FRAMEWORK OF RAN-GRK

## 1. What is the Action Plan?

1. an integral part of National Development Plan and updated according to scientific and policy development
2. integrated actions among sectors – environmental carrying capacity and spatial plan
3. intended to contribute to global efforts to reduce emissions and to tap international funding for Indonesia

## 2. The Action Plan is focused on :

1. GHG Emission Reduction
2. Increase of GHG Absorbtion Capacity (carbon sequestration)

## 3. The Action Plan - principles:

1. should not hinder economic growth, and prioritizing people's welfare → esp. in areas of energy resilience and food security
2. supports protection of the poor and vulnerable communities, including environment conservation in the framework of sustainable development
3. consists of core activities to reduce the emission and supporting activities to strengthen the policy framework



BAPPENAS

# Emission Reduction Target (2020)

Sector	Emission Reduction (Giga ton CO <sub>2</sub> e)		Action Plan	Institutions
	26%	+15%		
Forestry and Peatland	0,672	0,367	Forest and land fire control, water and hydrology management on peatland, forest and land rehabilitation, illegal logging control, avoiding deforestation, community development	MoFr, MoPW, MoA, MoE
Waste	0,048	0,030	Sanitary landfill development, 3 R and sewerage system in urban areas	MoPW, MoE
Agriculture	0,008	0,003	Introduction of low methane rice variety, irrigation efficiency, organic fertilizer utilization	MoA, MoPW, MoE
Industry	0,001	0,004	Energy efficiency, renewable energy development	MoI
Energy and Transportation	0,038	0,018	Fuel efficiency improvement, mass transportation, demand side management, renewable energy, energy efficiency	MoT, MoEnergy, MoPW, MoF



BAPPENAS

# WASTE

Target Reduction of Emission (26%) 0,048 (Giga ton)

:

**Implemented Policy to support NAP-GHG :**

1. Increase waste management and liquid pollution

**Strategy :**

1. Improve garbage management process in landfills
2. Garbage reduction through 3R (reduce, reuse, recycle)
3. Environmentally safe waste/ garbage utilization for energy production.
4. Improve waste management in cities.
5. Institutional and regulation improvement in regions (Local Regulations)

NO	ACTION PLAN	TARGET INDICATOR	VOLUME ACTIVITY	PERIOD	LOCATION	BUDGET		PERSON IN CHARGE	INFORMATION
						RP. (Billion )	SOURCE		
1.	Development of waste facilities with system off-site and on-site	<ul style="list-style-type: none"> <li>▪ Waste management access for 10% of citizen through off-site system (5% centralized system for city and 5% communal management system)</li> <li>▪ Potential for reduction of emission CO<sub>2</sub> 2010–2020: 0,0024118 Gton CO<sub>2e</sub></li> </ul>	<ul style="list-style-type: none"> <li>▪ Waste management access for 10% of citizen through off-site system (5% centralized system for city and 5% communal management</li> </ul>	2010–2014	Off-site: 16 cities,  Development: Medan, Jakarta, Bandung, Cirebon, DIY, Surakarta, Denpasar, Banjarmasin, Tangerang, Balikpapan,	Estimated budget 2010–2020: 18.248,83	APBN & APBD	Directorate General Cipta Karya, Ministry of Public Works	Logical Framework : With well-managed waste system in regions with on/off site, waste emission will be decrease





## RELATION BETWEEN RAN-GRK & NAMAs

1. In principle RAN GRK is Indonesian version of NAMAs
2. Even though until now there is no agreement yet about NAMAs, about the scope, methodology, definition etc, but based on the trend of negotiation at UNFCCC, therefore to make RAN-GRK receive international recognition, Indonesia will review RAN-GRK based on the latest development at national level and at UNFCCC negotiation. Some issues will be develop further for such as:
  - + Better calculation of national baseline with improved data and methodology
  - + Develop mitigation actions and carbon accounting based on abatement cost
  - + MRV indicators
  - + National Registry system

THANK YOU

---