# "Assessing Co-benefits from Policies in Thailand"

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The 10<sup>th</sup> Asian Co-benefits Partnership (ACP)
Advisory Group Meeting

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#### Thailand's NDC Roadmap on Mitigation 2021-2030

#### Thailand's NDC



Statement by H.E. General Prayut Chan-o-cha (Ret.), Prime Minister of the Kingdom of Thailand at the General Debate of the 70th Session of the United Nations General Assembly

New York, 29 September 2015

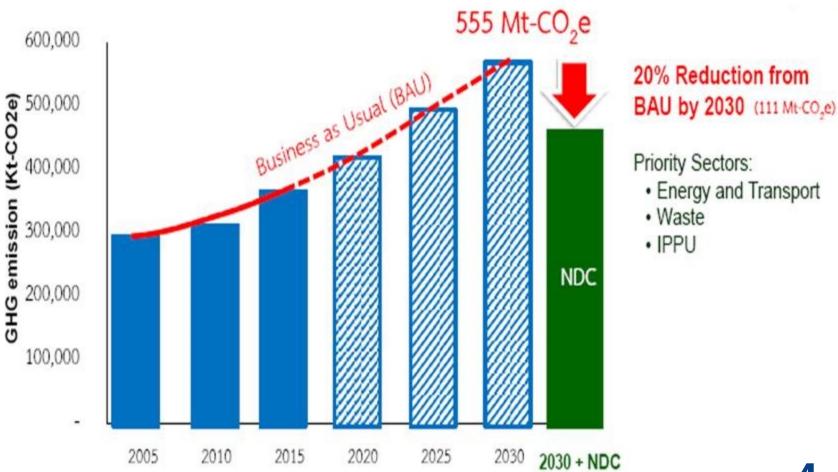


#### "THAILAND INTENDS TO REDUCE GREENHOUSE GAS EMISSIONS BY 20% FROM BAU LEVEL BY 2030"

The level of contribution could increase up to 25% subject to adequate and enhanced access to technology development and transfer, financial resources and capacity building support through a balanced and ambitious global agreement under the UNFCCC

## Thailand's NDC





## Thailand's NDC Roadmap on Mitigation 2021 - 2030



#### The Cabinet endorsed on 23th May 2017

- Main agencies develop sectoral action plans
- ONEP provide supportive action plan and MRV guideline
- Bureau of the Budget support and allocate budget for implementing
- Implementing agencies report the progress to ONEP every 6 months
- Monitoring and report once a year (according to the MRV guideline)

Energy & 113 MtCO<sub>2</sub>eq

Transport Increase perficiency



Energy efficiency in buildings/households



- · Renewable energy generation
- Promote biofuels etc.







- Waste reduction
- Municipal wastewater management
- Industrial wastewater management

#### 0.6 MtCO<sub>2</sub>eq

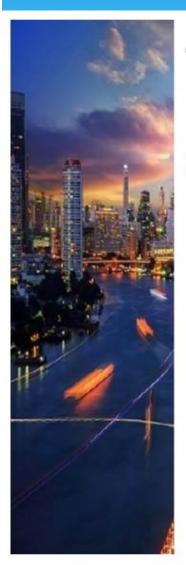
- Clinker substitution
- Replacement of refrigerants



₩ 20.8°/0



### Thailand's NCD Formation



#### Thailand's NDC Formulation

#### Planning processes

- Consistent with the Philosophy of Sufficiency Economy and the Principle of Sustainable Development
- Integration of national policies and plans
- Focus on plans which be driven by the government
  - support remodel towards sustainable development
  - lead to the actual implementation and evaluation
- Continue on the NAMAs activities

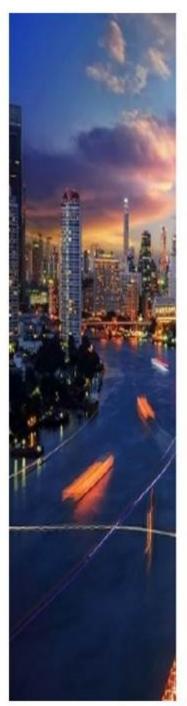


## **Preparatory Phase**



Developing the corresponding action plans to ensure the achievement of Thailand pledged targets of a 20% reduction from the 2030 BAU





## (draft) Supportive Action Plan for NDC Roadmap on Mitigation

- participatory processes:
  - 5 stakeholder consultations in 5 regional areas
  - 1 national consultation
- consists of 5 strategies

Cooperation from all stakeholders and capacity building in GHG reduction



Strategy 5

context of Thailand



Strategy 1

Supportive **Action Plan**  Development of economic mechanisms and incentives to support GHG reduction





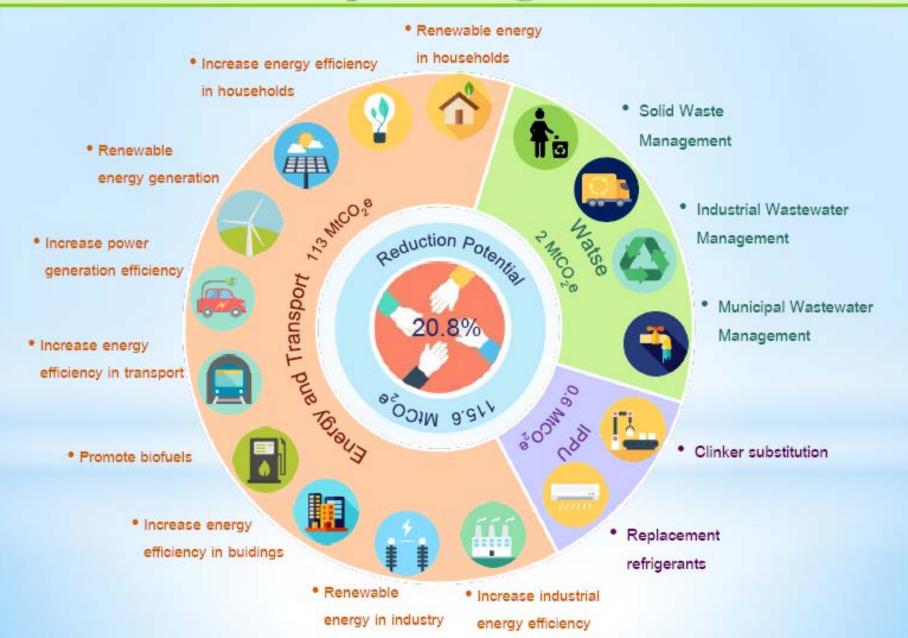




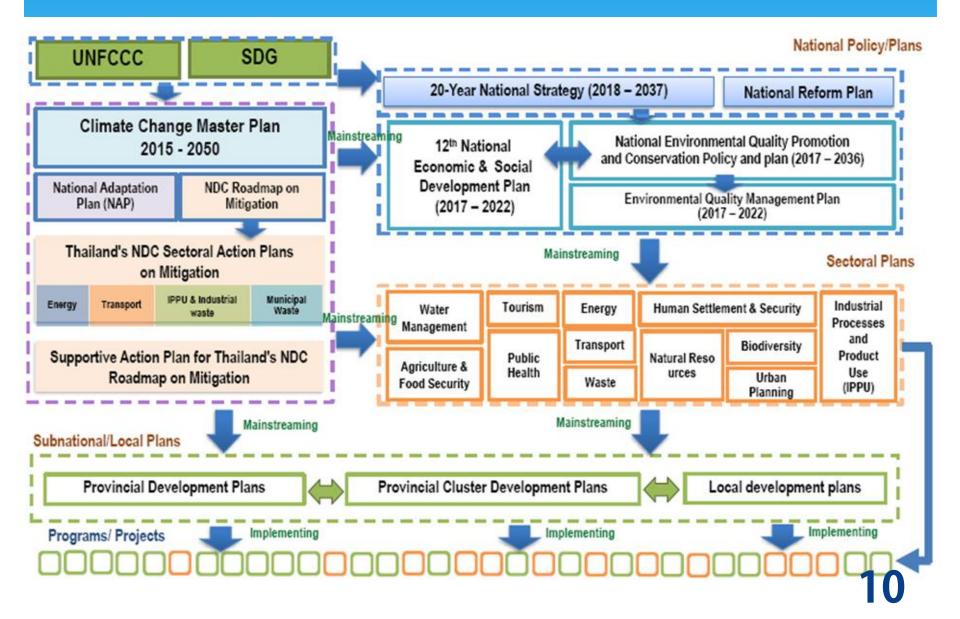
Development and improvement of laws or regulations to support GHG reduction



## NDC Roadmap on Mitigation 2021-2030



#### **Co-benefits from Policies in Thailand**



#### Case study: Policy & Co-benefits Approaches in Thailand

	Remarks
The Clean Development Mechanism (CDM project) Green Climate Fund (GCF)	-Thai-German Climate Programme : TGCP
Emission Standards  PM2.5 National Agenda  Food Waste Management  Green Procurement	-Proposed to be Euro 5 and Euro 6 in 2021 and 2022 respectively -Update Emission Inventory (2018) -Develop Emission Inventory of PM2.5 and Black carbon from inland water transport in Bangkok -Collaborated with GIZ, Germany -Collaborated with GIZ, Germany
	Mechanism (CDM project)  Green Climate Fund (GCF)  Emission Standards  PM2.5 National Agenda  Food Waste Management

#### Case study: Policy & Co-benefits Approaches in Thailand

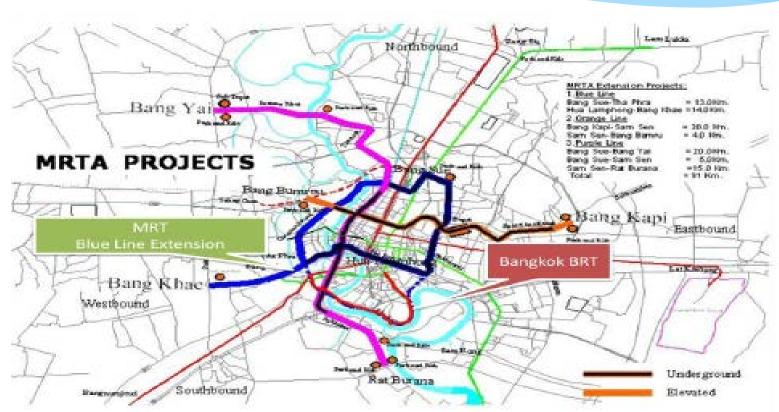
Ministry of Natural Resources and Environment	Policy	Remarks
Department of Environmental Quality Promotion (DEQP)	Green Office Program Certificate	
<b>Ministry of Energy</b>		
Department of Alternative Energy Development and Efficiency	Alternative fuel promotion Waste to Energy Fuel Economy Standards Energy save building	
<b>Ministry of Industry</b>		
Thailand Industry Standards Institute (TISI)	Emission Standards  Green & Energy Sticker	-Electric vehicle standards been regulated in Thailand
Office of Industrial Economics	<b>Eco Sticker for vehicle products</b>	
<b>Department of Industry Works</b>	Industrial Processes and Product Use (IPPU)	GHG emissions Reduction 12

#### Case study: Policy & Co-benefits Approaches in Thailand

Ministry of Transport	Policy	Remarks
The Office of Transport and Traffic Policy and planning (OTP)	Mass Transportation System (BTS/MRT System) Congestion charge	-Research study with GIZ , Germany
Marine Department	Alternative energy for boats such as Electric and Solar energy MARPOL Convention	-Research study on Electric boat and Solar energy boat -Annex VI : Air Pollutants and GHGs
<b>Ministry of Finance</b>		
Excise Department	CO2/PM for Excise TAX No TAX for Electric vehicle	From 2020 to 2022
<b>Prime Minister's Office</b>		
The Board of Investment of Thailand (BOI)	Eco Car Phase I Project	2010 (Euro 4 Standards)
	Eco car Phase II Project	2019 (Euro 5 standards)

# Lesson and Learned: Co-benefits Assessment Bangkok BRT System

The Bangkok BRT System developed by Bangkok Metropolitan Administration (BMA) covering 15.9 kms. with 12 stations by 12-m length CNG buses.



### **Estimated Co-benefits of Bangkok BRT**

Items	2011 (Without BRT)	2011 (With BRT)	Savings (Without-With BRT)
Time Cost (baht/year)	372,519,519,162	369,352,291,793	3,167,226,369
Vehicle operating Cost (baht/year)	771,676,100,219	766,519,611,334	5,156,488,885
Loss by Traffic Accidents (Baht/year)	138,838,420,713	137,465,291,897	1,373,128,816
NOx (Baht/year)	89,622,738	89,223,337	399,401
CO (Baht/year)	-	-	-
PM (Baht/year)	10,925,647	10,913,821	11,826
CO2 (Baht/year)	14,744,613,000	14,651,757,000	92,856,000

Reference: IGES,2011

## Thank you very much for your kind attention

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