



“APN, LoCARNet and AIT/RRC.AP Capacity Building Workshop and Science-Policy Dialogue on Low Carbon Development”

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# Achieving Thailand's Nationally Determined Contributions: National Perspective



By

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# Presentation Outline

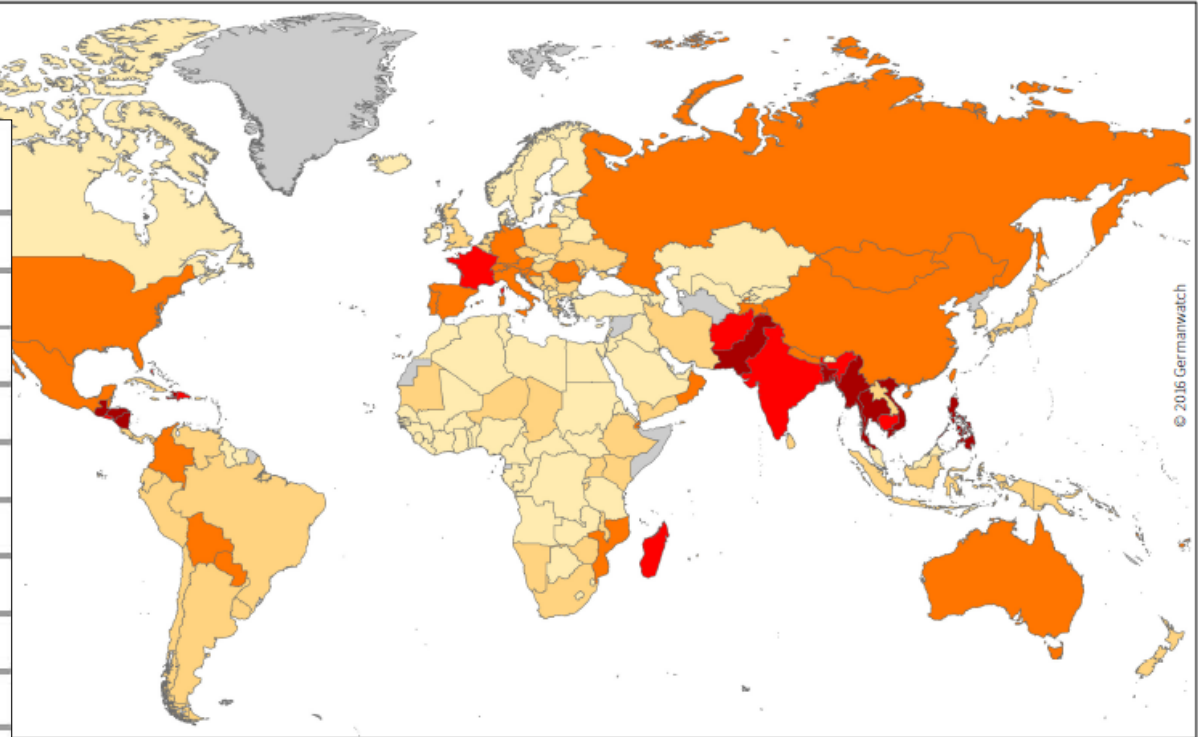
- Thailand Climate Change Situation and Impacts
- Paris Agreement
- Thailand Climate Change Mitigation
- Thailand's INDC Formulation
- NDC Roadmap on Mitigation 2021-2030

# Thailand Climate Change Situation

World Map of the Global Climate Risk Index 1996–2015

Countries most affected by extreme weather events (1996–2015)

1	Honduras
2	Myanmar
3	Haiti
4	Nicaragua
5	Philippines
6	Bangladesh
7	Pakistan
8	Vietnam
9	Guatemala
10	Thailand



the losses/deaths occurred in one year/event

Climate Risk Index: Ranking 1996–2015    1–10    11–20    21–50    51–100    >100    No data

Source: Germanwatch and Munich RE NatCatSERVICE

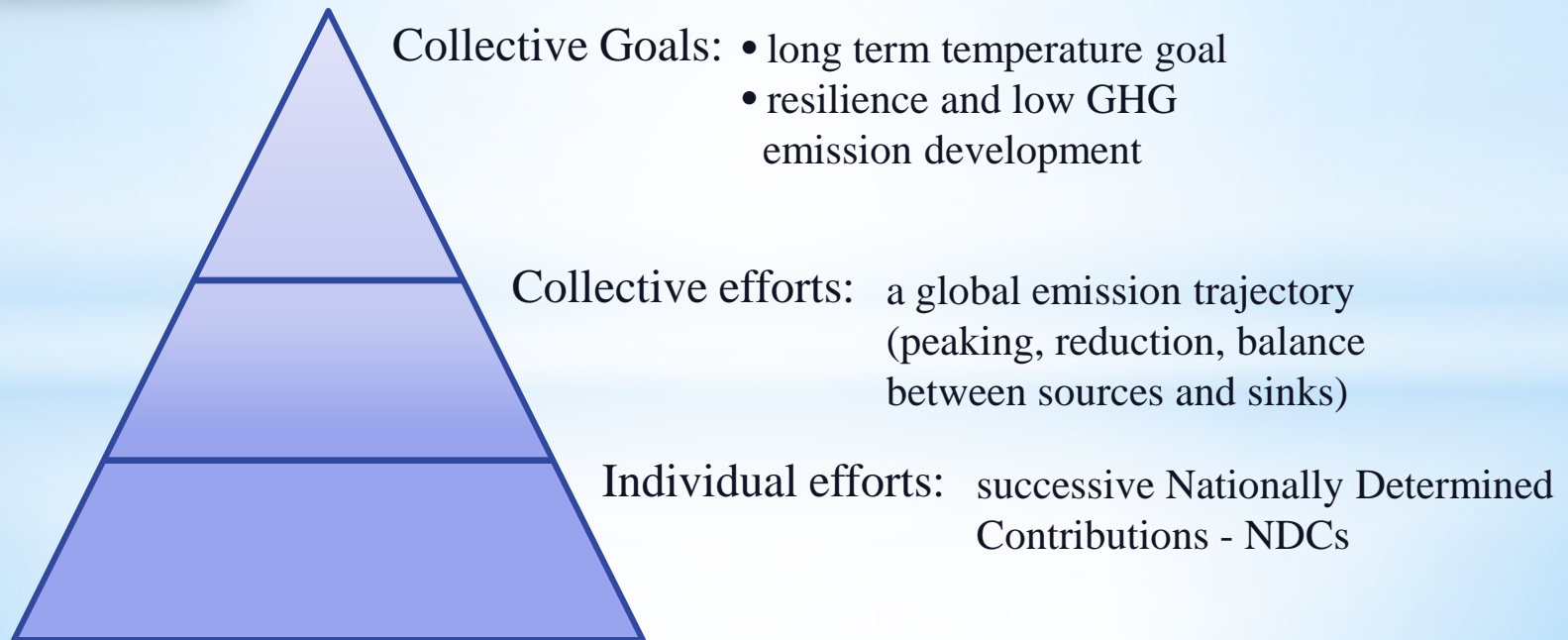
# Overview of Thailand Climate Change Impacts



# Paris Agreement



- The Paris deal is the world's first comprehensive climate agreement
- Adopted by consensus at COP21
- Went into effect on 4 November 2016



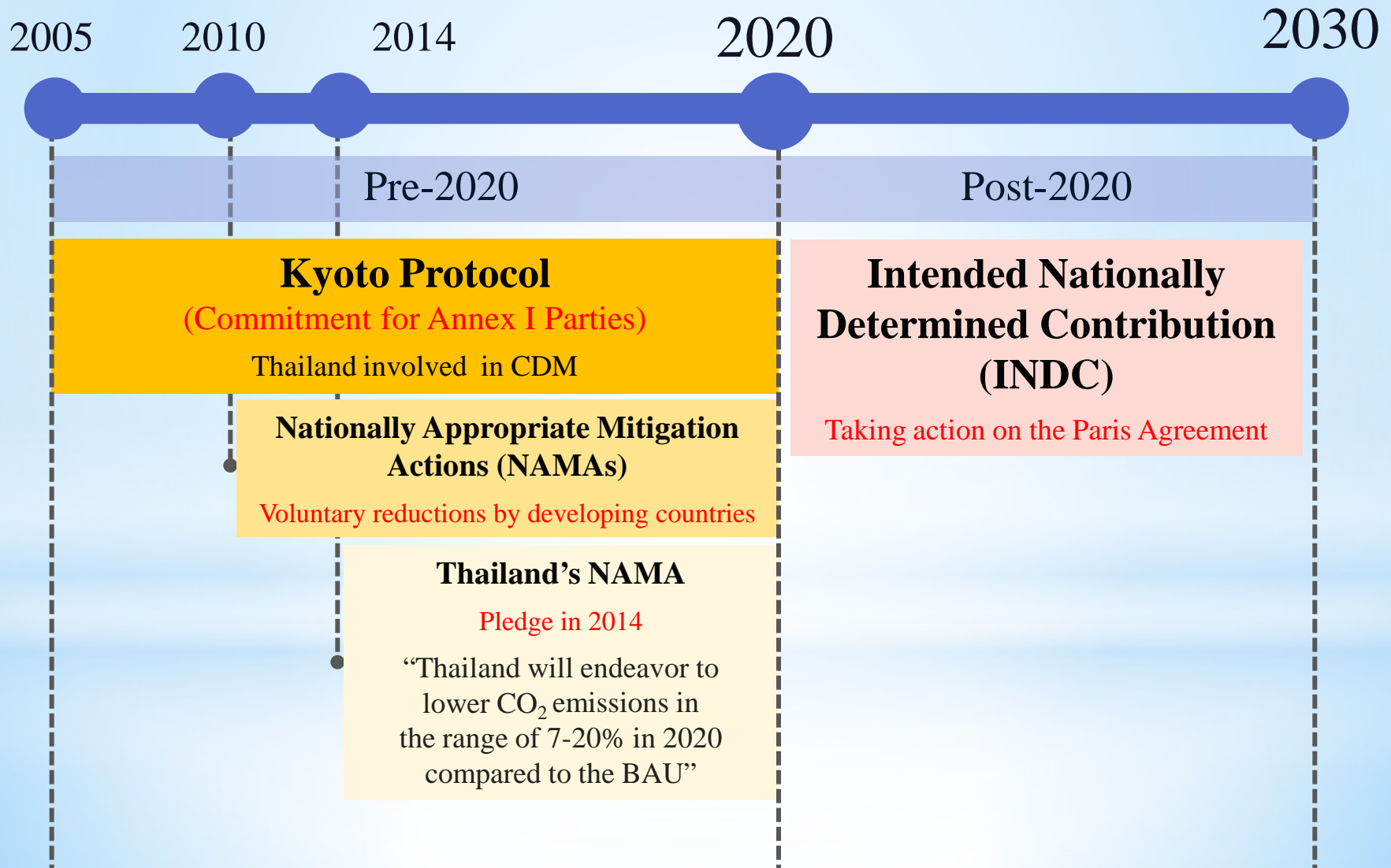
# Thailand's Response to the Paris Agreement

*Ratified the Paris Agreement  
on 21 September 2016*



*Signed the Paris Agreement  
on 22 April 2016*

# Thailand Climate Change Mitigation



# National Structure of Climate Change

**National Board of Climate Change Policy**  
(Chair: Prime Minister) M of MoNRE, M of MoFA

Found 2007

Sub Nt'l Board on  
Policy Integration  
(Chair: MoNRE  
Perm-Sec)

Amended  
2015

Sub Nt'l Board on  
Technical Support  
(Chair: ONEP  
Sec-Gen)

Amended  
2015

Sub Nt'l Board on  
Negotiation  
(Chair: MoNRE  
Perm-Sec)

Amended  
2015

Climate Change  
Coordinators (CCC)  
(30 Agencies :: 19  
Ministries + 11 Agencies  
under PM Office)

Appointed  
2010

**MoNRE**  
(Perm-Sec.)

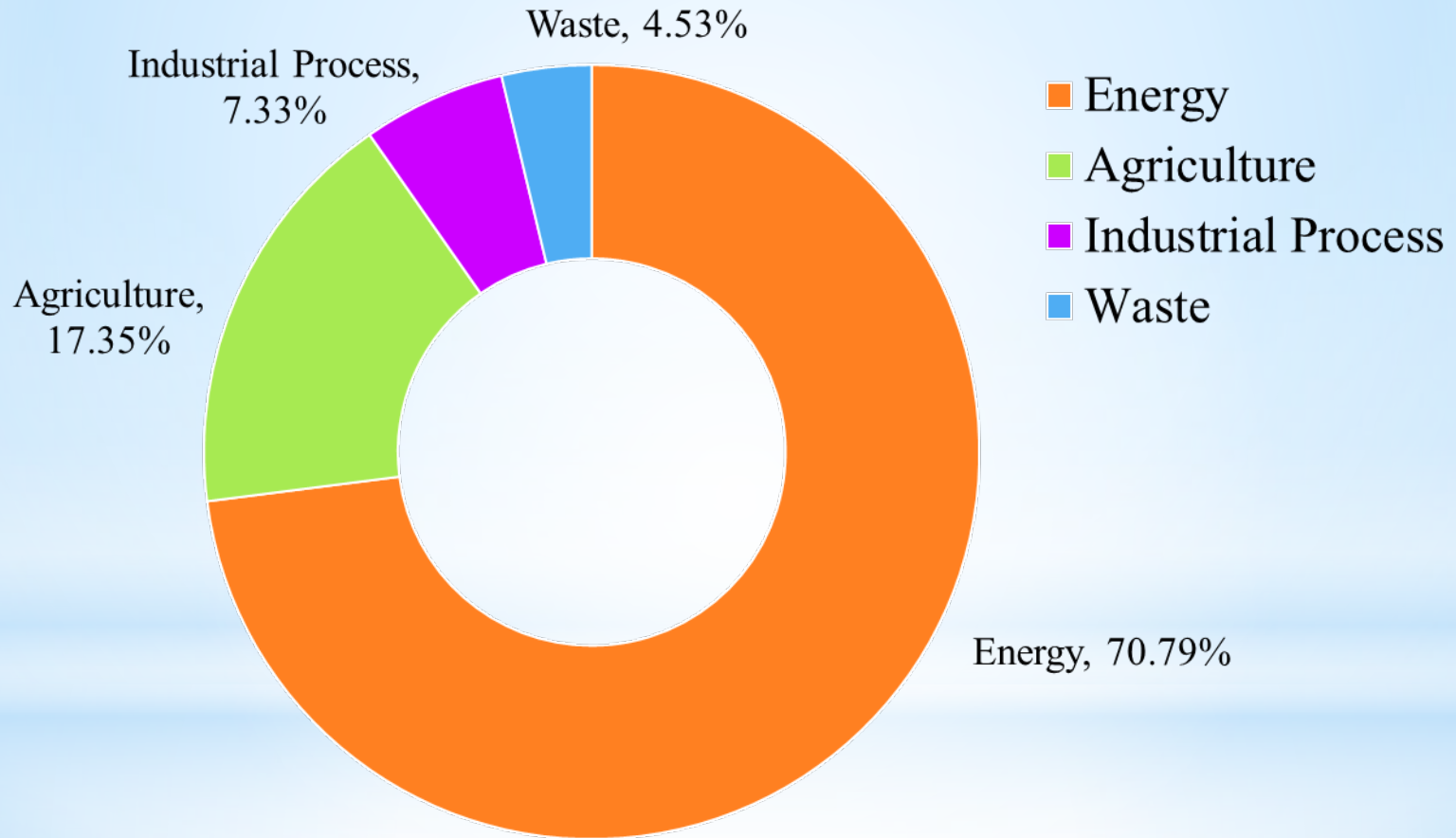
Secretary

Office of Natural Resources and Environmental Policy  
and Planning (ONEP)  
Climate Change Management Coordination Division  
(CCMC)  
(Policy formulation and National Focal Point)

Thai Green House Gas Organization  
(TGO)  
(DNA, GHG Management  
& CDM implementation)



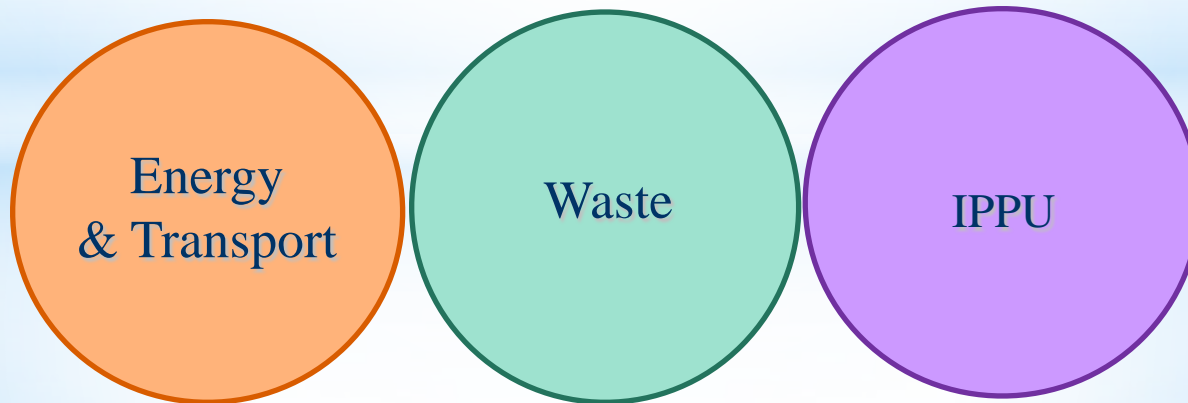
# Total GHG Emissions (excluding LULUCF) by Sector



*Ref. First Biennial Update Report*

# Thailand's INDC Formulation

- 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



# Climate Change Mitigation

**Statement by H.E. General Prayut Chan-o-cha (Ret.),**  
Prime Minister of the Kingdom of Thailand  
at the General Debate of the 70<sup>th</sup> Session of the United Nations General Assembly  
New York, **29 September 2015**

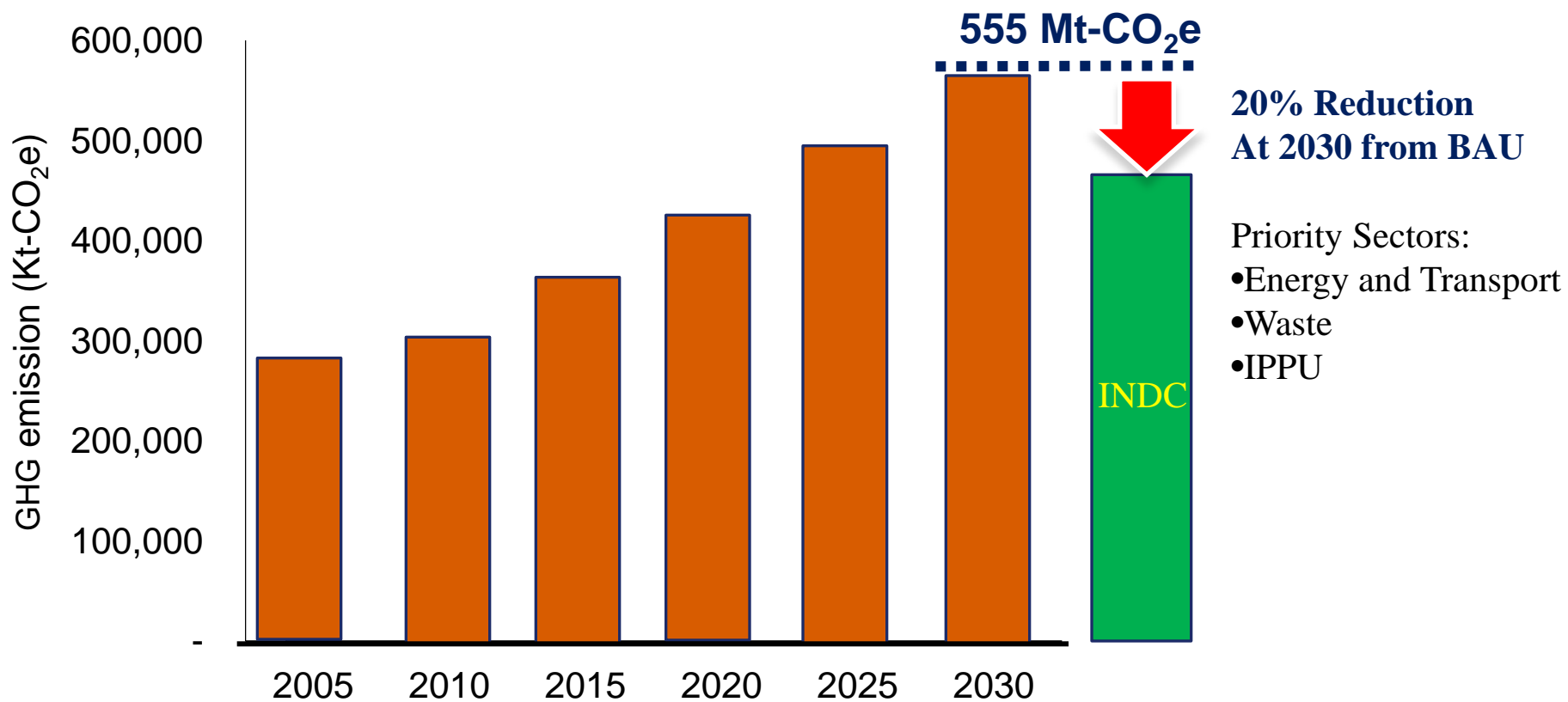


**“THAILAND INTENDS TO REDUCE  
GREENHOUSE GAS EMISSIONS BY 20%  
FROM BAU LEVEL BY 2030”**

***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

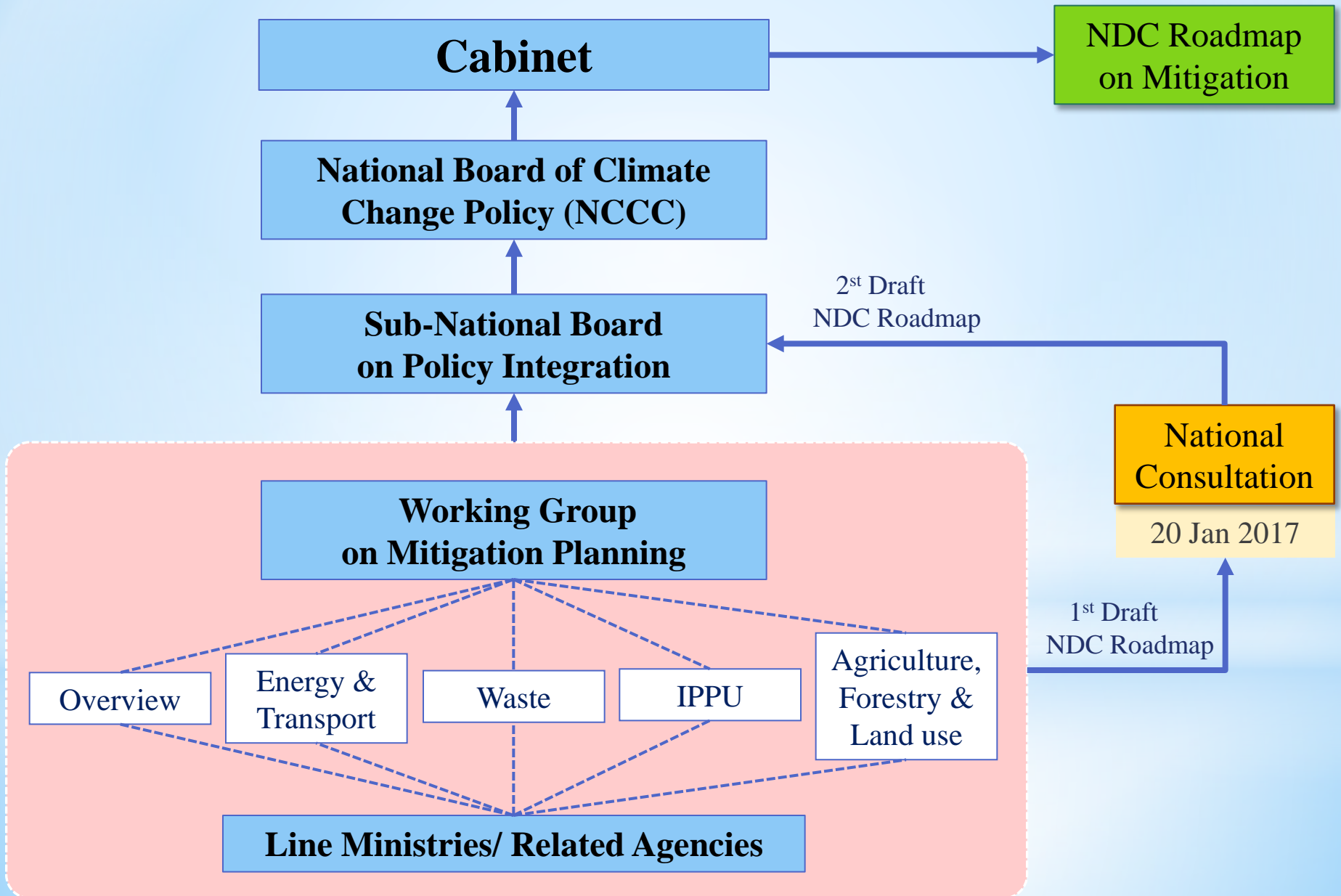
# Thailand's INDC



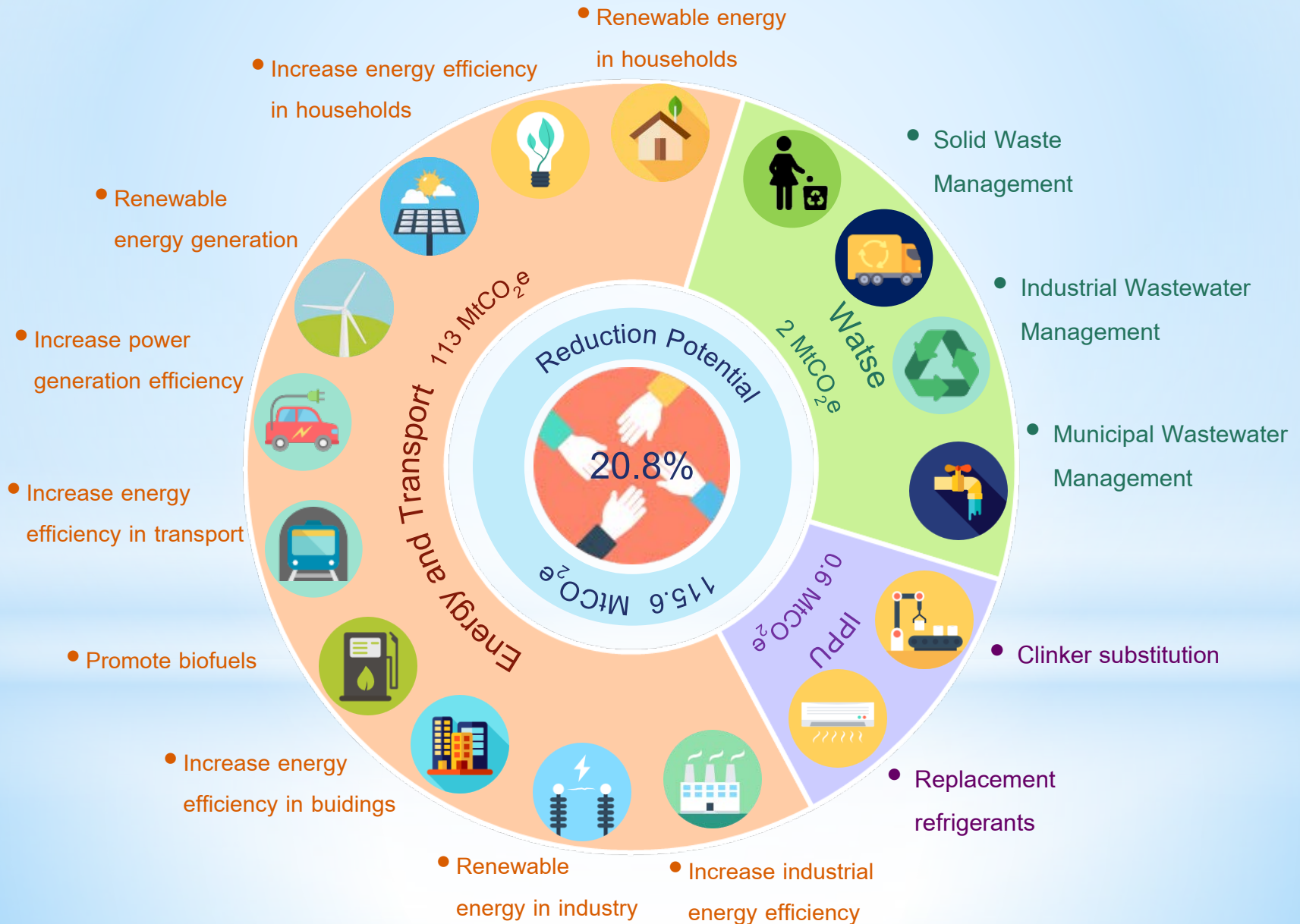
# Comparison of INDCs

Country	EU	US	China	South Korea	Singapore	Japan	Vietnam	Thailand
<b>Reduction Target</b>	40%	26-28%	60-65%	37%	36%	26%	8-25%	20-25%
<b>Type</b>	Absolute reduction	Absolute reduction	Carbon intensity	Reduction from BAU	Carbon intensity	Absolute reduction	Reduction from BAU	Reduction from BAU
<b>Base year</b>	1990	2005	2005	-	2005	2013FY	BAU (2010)	BAU (2005)
<b>Target Year</b>	2030	2025	2030	2030	2030	2030FY	2030	2030
<b>Scope</b>	Economy-wide	Economy-wide	Economy-wide	Economy-wide	Economy-wide	Economy-wide	Energy, Agriculture & Waste	Economy-wide Exclude Agriculture
<b>Peak year</b>	1979	-	2030	-	~ 2030	-	-	-
<b>Land Use Inclusion</b>	Yes	Yes	Yes	No	Yes / Small	Yes	Yes	No
<b>Market Mechanism</b>	EU-ETS	No	-	Yes	No / Interest	Yes	-	-
<b>Adaptation</b>	No	No	Yes	Yes	Yes	No	Yes	Yes
<b>Submission Date</b>	6 Mar'15	31 Mar'15	30 Jan'15	30 Jun'15	3 Jul'15	17 Jul'15	30 Sep'15	1 Oct'15

# Procedure of NDC Roadmap Development



# NDC Roadmap on Mitigation 2021-2030



# Plans to Meet Mitigation in NDC

- Power Development Plan, 2015-2036 (PDP2015)
- Thailand Smart Grid Development Master Plan, 2015-2036
- Energy Efficiency Plan, 2015-2036 (EEP2015)
- Alternative Energy Development Plan, 2015-2036 (AEDP2015)
- Master Plan for Sustainable Transport System and Mitigation of Climate Change Impacts
- National Industrial Development Master Plan, 2012-2031
- Waste Management Master Plan (2016 – 2021)
- Environmental Quality Management Plan, 2017 – 2021 (EQMP)
- Montreal Protocol Implementation
- RAC NAMA Project



# Supporting Measures



# Driven Approach

2017

2021

2030

Preparation phase

Implementation phase

**CABINET  
approve  
NDC  
Roadmap**

**Line Ministries/  
Related Agencies**

- develop mitigation action plan
- prepare driven mechanism

**ONEP  
(CC focal point)**

- provide driven-action plan to support capacity of implementing agencies
- develop MRV guideline

**Bureau of the  
Budget**

- support and allocate budget

**Energy &  
Transport**

- Increasing energy efficiency generation
- Renewable energy
- Increasing energy efficiency
- Promoting biofuels

**20.4%  
(113 MtCO<sub>2</sub>e)**

**Waste**

- Solid waste management
- Industrial wastewater management
- Municipal wastewater management

**0.3%  
(2 MtCO<sub>2</sub>e)**

**IPPU**

- Clinker substitution
- Refrigerant replacement

**0.1%  
(0.6 MtCO<sub>2</sub>e)**

**Reduce GHG emission 20% from BAU level by 2030  
(115.6 MtCO<sub>2</sub>e)**

Monitor and report once a year,  
according to the MRV guideline

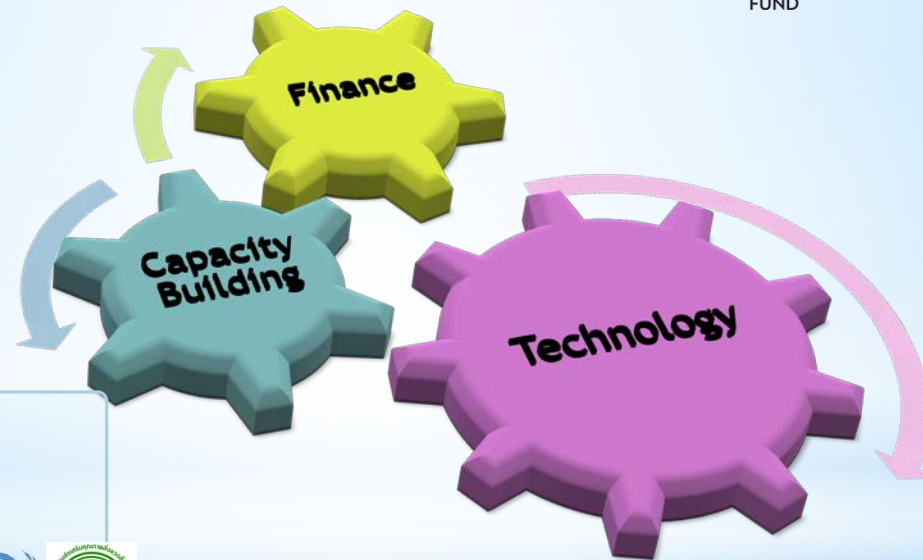
Implementing agencies report progress to ONEP every 6 months

# How to Achieve Thailand NDC

Readiness program &  
Country work program



GREEN  
CLIMATE  
FUND



Public relations &  
Capacity building  
programs



Technology roadmap &  
Database



Climate Technology Centre & Network

สวทช.  
www.ste.or.th



# Thank You

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