



# **Current Preparation of Nusantara Carbon Scheme (NCS):**

**Indonesia case on completing the building blocks**

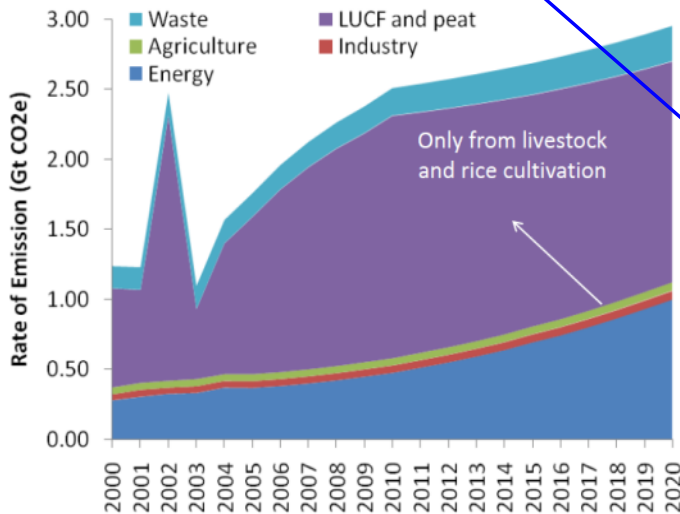
# Presentation Structure



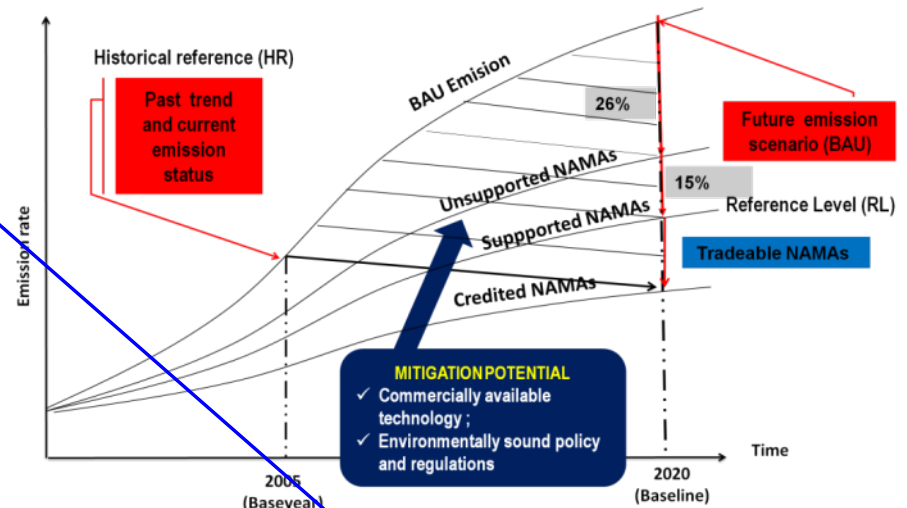
- 1. Mitigation policy framework and CDM status**
- 2. Toward the new market mechanism(s)**
- 3. Nusantara Carbon Scheme (NCS) development**
- 4. Remarks**

# Policy framework on CC mitigation

Historical and projection of GHG emission under BAU scenario by sector (2000-2020)



## Emission Reduction Targets



Source: SNC, 2010

- Indonesia is committed to reduce its GHG emissions by 26% under BAU level in 2020 (up to 41% with international support).
- Emission reduction is not compromising growth (26/7 vision).
- Indicative list of emissions reduction activities are now available (RAN-GRK).

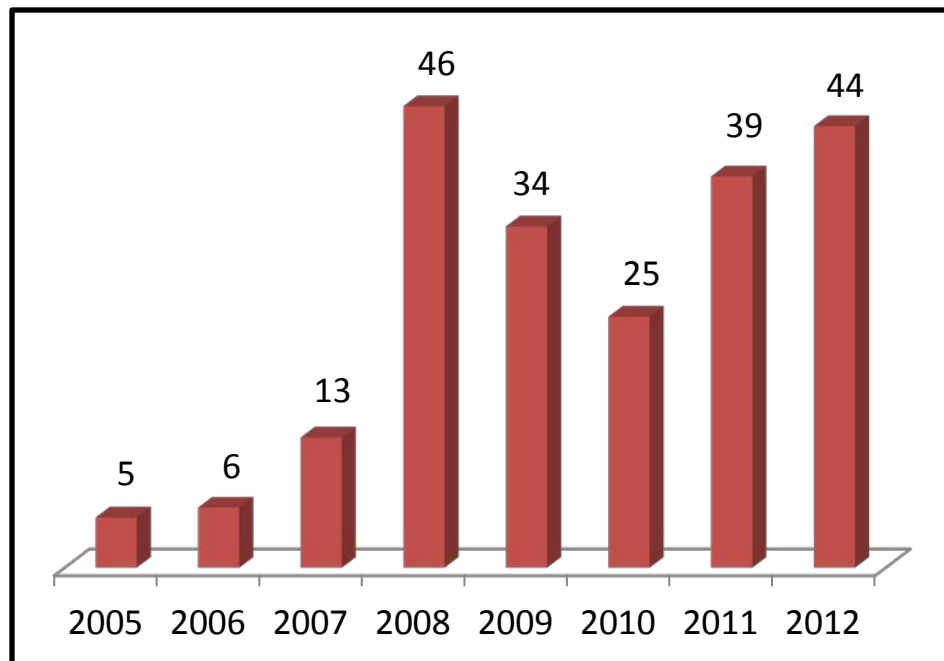
Sector	Unilateral	Supported
Forestry and Peat	0.672	1.039
Waste	0.048	0.078
Energy and Transport	0.038	0.056
Agriculture	0.008	0.011
Industry	0.001	0.005
<b>Total</b>	<b>0.767</b>	<b>1.189</b>

(in GtCO<sub>2</sub>e)

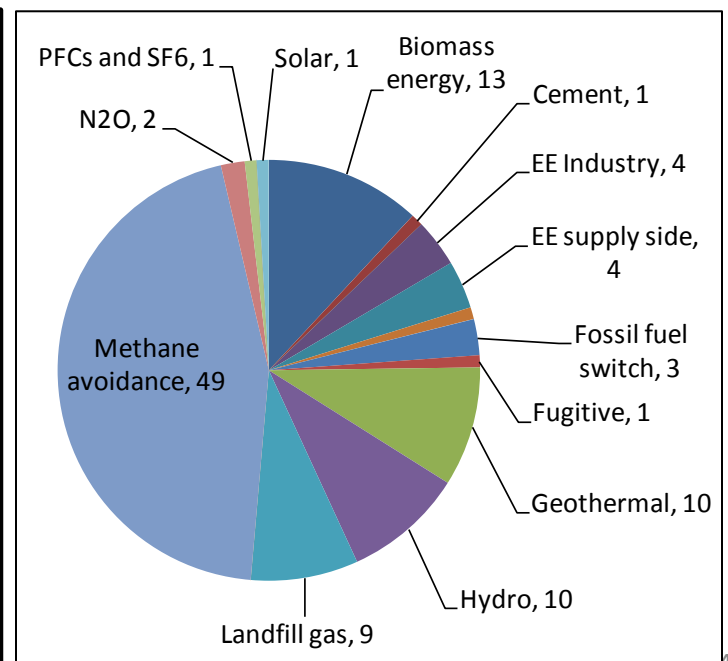
Source: PD#61/2011

# Indonesian CDM status (as per Feb. 2013)

- 2004 - Indonesia ratifies Kyoto Protocol
- 2005 - Establishment of Indonesian DNA, NC-CDM, hosted in Ministry of Environment
- 2008 - Establishment of National Council on Climate Change (NCCC)
- 2009 - NC-CDM is hosted in NCCC
- 2012 - total 212 projects received DNA approval, 123 registered + 6 PoAs, 27 projects had CERs issuance of total 7.5 MtCO<sub>2</sub>e



*LoA issuance by year*



*Registered projects by type*

# Barriers/issues related to CDM

- Awareness and knowledge about CDM is not distributed equally among stakeholders
- High transaction cost associated with PDD development, validation/verification, additional processes during monitoring, etc. hampers small/micro projects to enter CDM
- Low CER price nowadays may not justify the extra efforts that must be done by the project developers
- Restriction from EU is back paddling CDM penetration in Indonesia
- Post-KP1 development cut the demand even further since non-KP2 participant is not allowed to transfer and/or acquire CERs

***Investment interest in emissions reduction/CDM projects is decreased significantly!***

# Expectations for future carbon market

- **Market mechanism should be significant enough to support national low carbon growth**
- **Different mechanisms should be able to complement each other, e.g. mandatory – voluntary, domestic – international**

<i>Voluntary Offset</i>	<i>Cap and Trade</i>
<ul style="list-style-type: none"><li>▪ Politically easier to established</li><li>▪ Doesn't need a comprehensive technical preparation</li><li>▪ Encourage people's awareness</li><li>▪ Complex operation due its nature as project based</li><li>▪ Relatively small coverage</li></ul>	<ul style="list-style-type: none"><li>▪ Need strong political decision</li><li>▪ Simpler operation but need a comprehensive preparation</li><li>▪ Can cover large emission reduction potential</li><li>▪ Encourage large scale green-investment</li><li>▪ Apprehension of 'leakage'</li></ul>

***Domestic and/or regional market-initiatives should be encouraged to scale up mitigation actions whilst accommodating local conditions!***

# Nusantara Carbon Scheme (NCS)

- **A voluntary-based emissions reduction project's certification and registration scheme**
- **Based on SNI ISO 14064 series**
- **Integrates emissions reduction and sustainable development**
- **Sectoral Scope:**
  1. **Renewable energy;**
  2. **Energy efficiency;**
  3. **Enhancement of industrial process;**
  4. **Sustainable waste management;**
  5. **Aforestation/reforestation;**
  6. **REDD+; and**
  7. **Sustainable agriculture.**

# Project's Co-benefit

- **Project must be able to proof its contribution to SD within these 3 categories and indicators as follow:**

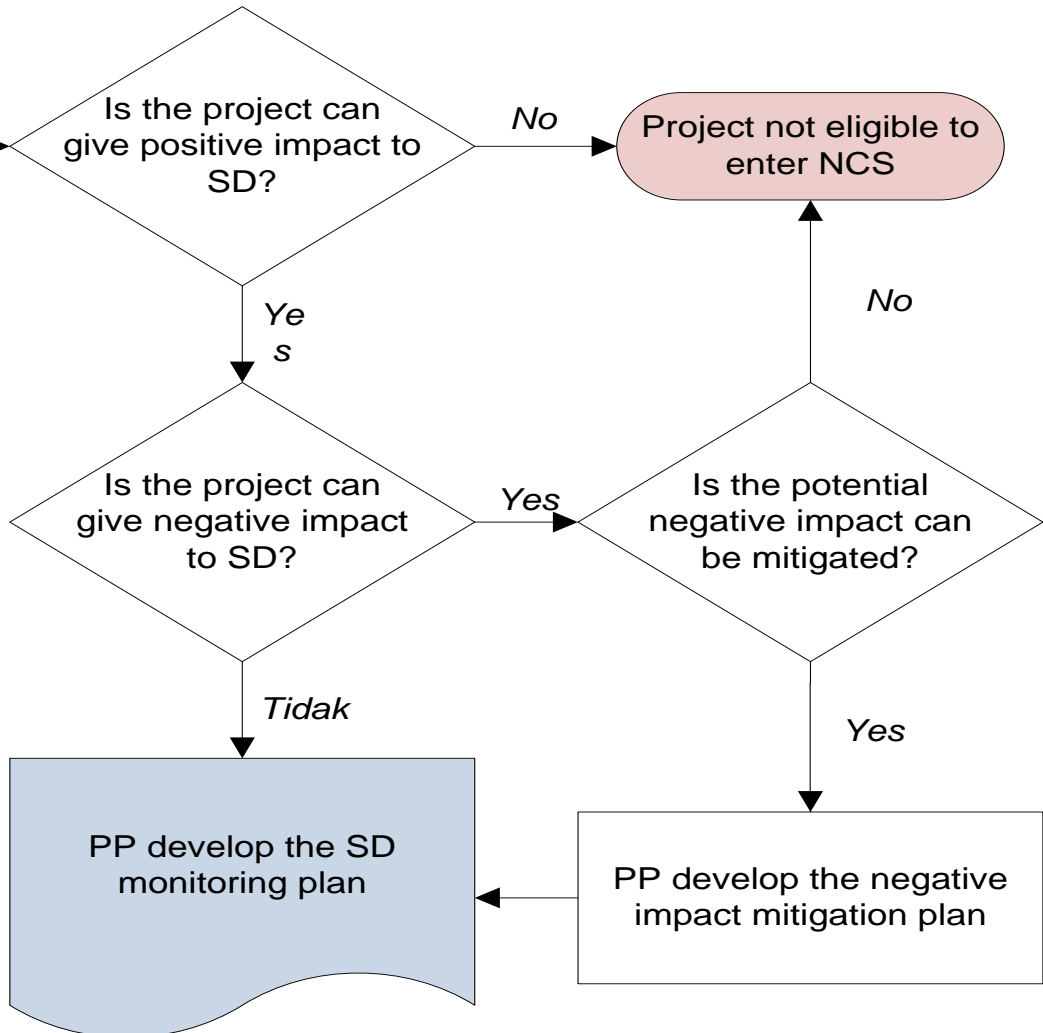
Category / Indicator	
<b>Environment</b>	Local ecological function
	Quantity and quality of natural resources
	Biodiversity
	Health and safety
<b>Economic</b>	Community's income
	Jobs provision
<b>Social</b>	Access to public goods/facilities and services
	Social integrity
	Relocation impact
	Culture respect

- **Project proponent can add more indicator according to its project characteristic**
- **Performance of SD contribution will give differentiation to NCS projects**



# Project's Co-benefit (ctd.)

Referring the indicator set, PP assesses the project potential impacts and risks



**In NCS,  
contribution to  
sustainable  
development must  
be monitored and  
verified!**

# NCS development status

- **2<sup>nd</sup> draft of Requirements and Sustainable Development Guidelines are available (open for public comments)**
- **Development of accreditation scheme for validation/verification body (cooperation with the National Accreditation Board)**
- **Registry database under development**
- **Several methodologies and guidelines are under development with support from IGES**

## **Methodologies under development:**

- **Boiler efficiency improvement**
- **Fuel switch to biomass residues**
- **Mangrove rehabilitation**
- **Hydropower**
- **Composting**
- **Cook stove efficiency improvement**

## **Guidelines under development:**

- **Monitoring guideline**
- **Guideline to assess non-permanence for forestry projects**

# Piloting the Scheme

## Potential pilot project:

**Mangrove Reforestation and Coastal Green-belt Protection in Aceh and North Sumatra Province**

**Developer: Yagasu Foundation**

**Potential ER: 30 tCO<sub>2</sub>/ha/y (conservative estimation)**



# IGES Capacity Building FY 2012

- Development of methodologies and guidelines for Nusantara Carbon Scheme (on going)
- Training/Workshop on :
  - Accreditation/Validation/Verification according to SNI ISO 14064/5
  - Doha outcome related to market mechanisms
- Research on REDD+ and Future Market Mechanism (on going)



# Remarks



- NCS preparation is regarded as **building blocks development** of market mechanism
- There should be an international guideline to enable **simultaneous development of different mechanisms** in a convergent way
- Procedures and standard for market mechanism should be robust yet **allows broad participation**
- Indonesia will start from voluntary-based instrument (i.e. with NCS) whilst seeking the **opportunities to scale up**