

**EMISSIONS AVOIDANCE  
AS AN ELIGIBLE MITIGATION ACTIVITY  
UNDER ARTICLE 6.2, 6.4 & 6.8**

**Albert A. Magalang**

Department of Environment and  
Natural Resources

The Philippines

# CMA DECISIONS ON EMISSIONS AVOIDANCE

## CMA 3 decisions

- Article 6.2: Decision 2/CMA 3

Para 3(c) Consideration of whether internationally transferred mitigation outcomes could include emission avoidance;

- Article 6.4: Decision 3/CMA 3

Para 7(h) The consideration of whether activities could include emission avoidance and conservation enhancement activities;

## CMA 4 decisions

- Article 6.2: Decision 6/CMA 4

Para 16(b)(ii) Consideration of whether internationally transferred mitigation outcomes could include emission;

- Article 6.4: Decision 7/CMA 4

Para 9 (a) Consideration of whether Article 6, paragraph 4, activities could include emission avoidance and conservation enhancement activities

Para 10 – Parties to submit their views and Secretariat to prepare Synthesis Report

Para 11 – Secretariat to organize a technical experts' dialogue

# WHAT IS EMISSIONS AVOIDANCE?

- ❑ could be formally defined as “*full displacement or prevention of GHG emissions expected to be generated by planned GHG emitting activity in energy, transport, manufacturing, agriculture, human induced deforestation, and other GHG emitting development activities.*”
- ❑ A proactive rather than reactive way of dealing with greenhouse gas emissions as it cuts and/or displace emissions at their source, thus, preventing them from being emitted.
- ❑ It is derived from the application of a systematic risk management approach that tells us that prevention of the adverse impacts can happen if we avoid the source or root cause of risks which in this case, are the greenhouse gases.

As a risk management measure, full prevention of GHGs will translate to full avoidance of impacts which aggravate global warming that translates to intensified loss and damage.

# LEGAL AND TECHNICAL SOURCE(S) OF CONCEPT AND CONTEXT OF EMISSIONS AVOIDANCE

- **Article 3, para 2 of the Convention states** that ...” The Parties should take **precautionary measures to anticipate, prevent or minimize the causes of climate change** and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, considering that policies and measures to deal with climate change should be cost-effective to ensure global benefits at the lowest possible cost.
- **The Paris Agreement Preamble states:** *Also recognizing that deep reductions in global emissions* will be required to achieve the ultimate objective of the Convention and *emphasizing* the need for urgency in addressing climate change....

# DIFFERENCE BETWEEN EMISSIONS AVOIDANCE & EMISSIONS REDUCTION

- Emissions Avoidance will fully prevent the release of potential GHGs, ex ante (e.g. through the use of non-GHG emitting technologies) , while Emissions Reduction will only partially mitigate or lessen the amount of emissions produced.
- Emissions Avoidance will translate to zero/no additional risk while Emissions Reduction will still have residual risks and, therefore, result in impacts down the line.
- Both would result in mitigating the risks and potential damage(s), but they differ in the degree of management efficacy of the cascading risks and impacts.
- PH considers Emissions Avoidance as a serious option for GHG mitigation because of its higher mitigation value, instead of just limited value for emissions reduction.

# IMPERATIVES FOR DEVELOPING COUNTRIES

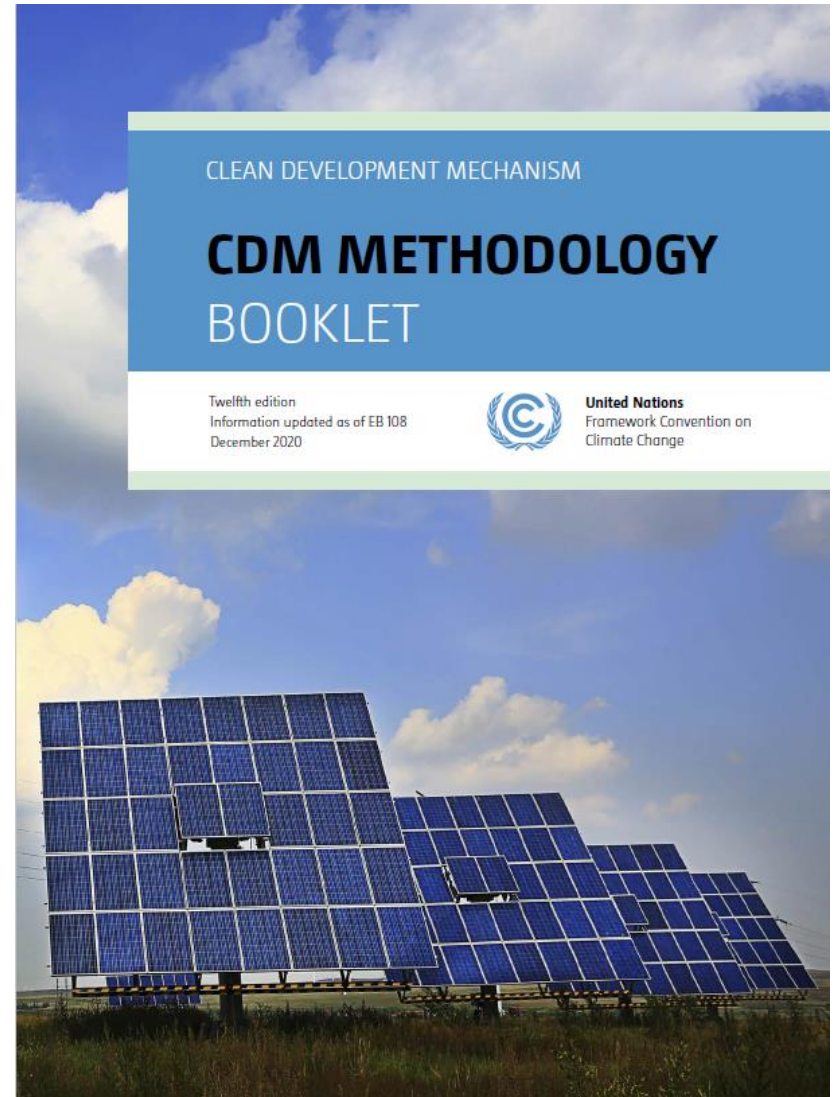
- It should be noted that developing countries are guaranteed unhampered socio-economic development under the Convention and its Protocols even if that means having to continually use fossils under a worst-case scenario if the committed means of implementation (MOI) are not provided.
- emissions avoidance is major solution because unnecessary emissions will no longer be generated by developing countries if they have acquired the MOI, including non-GHG emitting technologies, rather than having the actual emissions that should be cleaned up or mitigated later on.

# Emissions Avoidance as an Eligible CDM Activity

## CATEGORIZATION BY MITIGATION ACTIVITY

In addition to the methodology sectoral scopes, methodologies are also categorized by the type of mitigation activity, these being:

- renewable energy
- low carbon electricity generation
- energy efficiency measures
- fuel switch
- GHG destruction
- **GHG emission avoidance** and
- GHG removal by sinks.



# GHG EMISSION AVOIDANCE

This category includes various activities where the release of GHG emissions to the atmosphere is reduced or avoided.

*Examples:*

- Avoidance of anaerobic decay of biomass;
- Mitigation of GHG emissions with treatment of wastewater in aerobic wastewater treatment plants





# METHODOLOGIES ON EMISSION AVOIDANCE PER SECTOR

Sector/Scope	Methodology	Title
Manufacturing industries (7)	<b>AM0057</b>	Avoided emissions from biomass wastes through use as feed stock in pulp and paper, cardboard, fibreboard or bio-oil production
	<b>AM0065</b>	Replacement of SF <sub>6</sub> with alternate cover gas in the magnesium industry
	<b>AM0092</b>	Substitution of PFC gases for cleaning Chemical Vapour Deposition (CVD) reactors in the semiconductor industry
	<b>AM0121</b>	Emission reduction from partial switching of raw materials and increasing the share of additives in the production of blended cement
	<b>ACM0005</b>	Increasing the blend in cement production
	<b>ACM0021</b>	Reduction of emissions from charcoal production by improved kiln design and/or abatement of methane
	<b>AMS-III.L.</b>	Avoidance of methane production from biomass decay through controlled pyrolysis

# METHODOLOGIES ON EMISSION AVOIDANCE PER SECTOR

Sector/Scope	Methodology	Title
Agriculture (5)	<b>AMS-III.A.</b>	Offsetting of synthetic nitrogen fertilizers by inoculant application in legumes-grass rotations on acidic soils on existing cropland
	<b>AMS-III.AU.</b>	Methane emission reduction by adjusted water management practice in rice cultivation
	<b>AMS-III.BE.</b>	Avoidance of methane and nitrous oxide emissions from sugarcane pre-harvest open burning through mulching
	<b>AMS-III.BF.</b>	Reduction of N <sub>2</sub> O emissions from use of Nitrogen Use Efficient (NUE) seeds that require less fertilizer application
	<b>AMS-III.BK.</b>	Strategic feed supplementation in smallholder dairy sector to increase productivity

# METHODOLOGIES ON EMISSION AVOIDANCE PER SECTOR

Sector/Scope	Methodology	Title
Chemical Industries (3)	<b>AM0053</b>	Biogenic methane injection to a natural gas distribution grid
	<b>AMS-III.M.</b>	Reduction in consumption of electricity by recovering soda from paper manufacturing process
	<b>AMS-III.AI.</b>	Emission reductions through recovery of spent sulphuric acid
Metal Production (3)	<b>AM0030</b>	PFC emission reductions from anode effect mitigation at primary aluminium smelting facilities
	<b>AM0059</b>	Reduction in GHGs emission from primary aluminium smelters
	<b>AM0065</b>	Replacement of SF <sub>6</sub> with alternate cover gas in the magnesium industry
Fugitive emissions from fuel (solid, oil and gas) (3)	<b>AM0023</b>	Leak detection and repair in gas production, processing, transmission, storage and distribution systems and in refinery facilities
	<b>AM0043</b>	Leak reduction from a natural gas distribution grid by replacing old cast iron pipes or steel pipes without cathodic protection with polyethylene pipes
	<b>AMS-III.BI.</b>	Flare gas recovery in gas treating facilities

# METHODOLOGIES ON EMISSION AVOIDANCE PER SECTOR

Sector/Scope	Methodology	Title
Waste handling and disposal (13)	AM0057	Avoided emissions from biomass wastes through use as feedstock in pulp and paper, cardboard, fibreboard or bio-oil production
	AM0080	Mitigation of greenhouse gases emissions with treatment of wastewater in aerobic wastewater treatment plants
	AM0083	Avoidance of landfill gas emissions by in-situ aeration of landfills
	AM0093	Avoidance of landfill gas emissions by passive aeration of landfills
	AM0112	Less carbon intensive power generation through continuous reductive distillation of waste
	ACM0022	Alternative waste treatment processes
	AMS-III.E.	Avoidance of methane production from decay of biomass through controlled combustion, gasification or mechanical/thermal treatment
	AMS-III.F.	Avoidance of methane emissions through composting
	AMS-III.I.	Avoidance of methane production in wastewater treatment through replacement of anaerobic systems by aerobic systems
	AMS-III.Y.	Methane avoidance through separation of solids from wastewater or manure treatment systems
	AMS-III.AF.	Avoidance of methane emissions through excavating and composting of partially decayed municipal solid waste (MSW)
	AMS-III.AO.	Methane recovery through controlled anaerobic digestion
	AMS-III.BE.	Avoidance of methane and nitrous oxide emissions from sugarcane pre-harvest open burning through mulching

# RENEWABLE ENERGY

This category includes the use of various renewable energy sources.

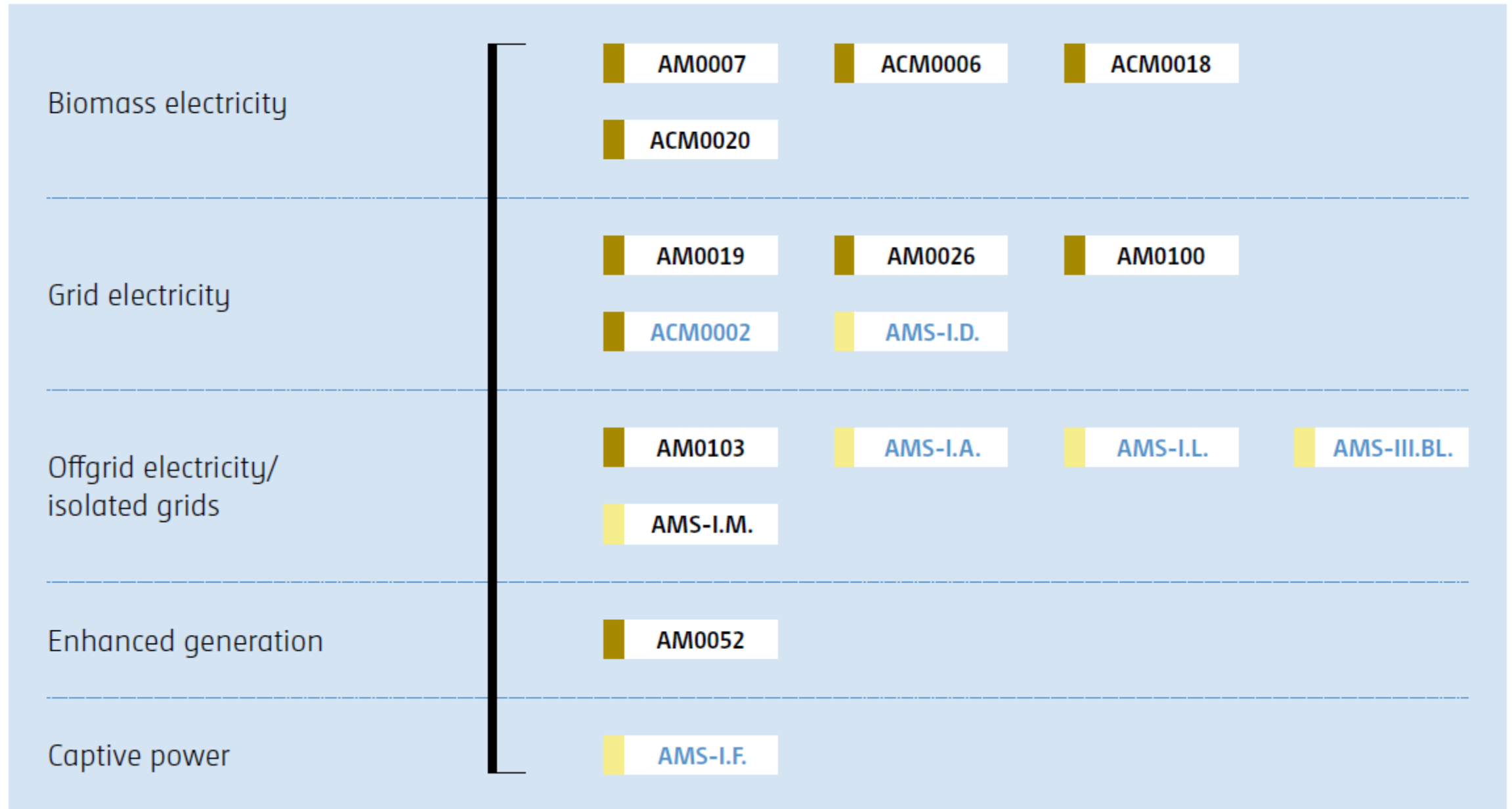
*Examples:*

- Hydro power plant;
- Wind power plant;
- Solar cooker;
- Biomass-fired boiler.



Figure VII-1.

## Methodologies for renewable electricity





**THANK YOU . . .**