

**MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT,
MALAYSIA**

**The Oil Palm Industry's Contribution toward Achieving Malaysia's 40%
Reduction in GHG Intensity of GDP**

IPSOC 2012

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IOI Marriott Hotel, Putrajaya**

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ENVIRONMENTAL MANAGEMENT AND CLIMATE CHANGE DIVISION

Outline

- History/Issues with Voluntary Mitigation Actions/ NAMAs
- Malaysia's Voluntary Indicator
- Negotiating backdrop and developments
- Opportunities for Emissions Reductions/Avoidance
- On-going Activities
- Transparency is our best ally
- What about 'market mechanisms'?
- What might lie ahead for developing countries ...

History/Issues with Voluntary Mitigation Actions/NAMAs

- Introduced as part of the Bali Action Plan (COP 13)
- In its original form:
 - Nationally determined as appropriate (national priorities)
 - Nationally defined (what constitute NAMAs)
 - Project/Programmes/Strategies/Targets/Policies
 - Nationally determined BAU Scenarios, baselines, methodologies
 - Nationally determined
 - Monitoring
 - Reporting(including reporting format and medium and frequency)
 - Nationally instituted and accredited verification

History/Issues with Voluntary Mitigation Actions/NAMAs

- Erosion of National determination began in Copenhagen
 - ▶ Where NAMAs should be inscribed under a legally-binding agreement
- By Durban, text of the Presidency (TIOI basis)
 - ▶ Request SBSTA to develop guidelines for the MRV of domestically funded NAMAs
 - ▶ Negotiations began in Bonn – Scheduled to be terminated in Doha
 - ▶ Impossible for One set of guidelines to fit all (past, present and future)?
- Still no common understanding on the nationally independent nature of NAMAs
- Malaysia's approach in accordance with the original concept

Malaysia's Voluntary Indicator Announced

“voluntary reduction of up to 40% in terms of carbon emission intensity of GDP by the year 2020 compared to 2005 levels.”

“....conditional on receiving the transfer of technology and finance of adequate and effective levels from Annex 1 countries”

“We remain committed to ensure at least 50% of our land area remain as forests as pledged in the Rio Summit. Currently our natural forests and agriculture crop plantations combined cover 75% of the country's land area.”



Prime Minister YAB Dato' Sri Mohd. Najib bin Tun Abdul Razak at the 17th December 2009, during his address to the 15th Conference of the Parties to the UNFCCC

*Set against the Negotiations Backdrop of NCs, **BAU** and **ICA***

- non-Annex I consistent ... **should** submit their first biennial update report by December 2014; the LDC and SIDS may submit biennial update reports at their discretion
- NAI parties **shall** submit a biennial update report every two years, either as a summary of parts of their NC ... or as a stand-alone update report
- First BUR **shall** cover, at a minimum, inventory for the calendar year no more than four years prior to the date of submission ...
- Guidelines **should** be used as the basis to provide guidance to OE of the financial mechanism for funding of preparation of BURs – in the case of the first BUR, the GEF
- Enhanced support **should** be provided by developed country Parties and other developed Parties included in Annex II to the Convention ... on the basis of agreed full-cost funding (USD 352⁶k)

*Set against the Negotiations Backdrop of NCs, **BAU** and **ICA***

- First round of International Consultation and Analysis (ICA) **will** be conducted for developing country Parties, commencing within six months of the submission of the first round of BURs
- Frequency of participation in subsequent rounds of ICA **will** be determined by the frequency of the submission of BURs
- LDCs and SIDs may undergo ICA as a group at their discretion
- Composition of expert groups under negotiation ...
- No mention of how ICA is to be funded ...

Opportunities for emissions reductions

- Energy efficiency measures
- Replacement of fossil fuels with renewable fuels
 - ▶ Direct combustion
 - ▶ Treatment followed by combustion
- Avoidance of emissions (methane/CO₂)
 - ▶ Disposal in landfills
 - ▶ Anaerobic digestion
 - ▶ Burning/oxidation of peat
- Sequestration in durable materials
 - ▶ Laminated products
 - ▶ Fibre-board products
- Sequestration in the environment
 - ▶ Plant
 - ▶ Soil

On-going Emissions Reduction/Avoidance Activities

➤ Physical plant

- ▶ Trunk
- ▶ Fronds

➤ Peat soil management

➤ CPO – B5 diesel blend (114.5 million litres)

➤ Mesocarp – more than 2/3 of a ton per ton of CPO produced

- ▶ Steam/Electricity/FIT

➤ EFB – more than a ton per ton of CPO produced

- ▶ Electricity/Briquettes/Co-composing with POME/Fertilizer/Fibre products

➤ POME – 3.25 tons per ton of CPO produced

- ▶ Methane yield – 40kg/ton CPO

➤ Post-consumer waste cooking oil-based bio-diesel

➤ BACKSTOP – Forest Conservation and Sustainable Forest Mgt. 9

Malaysia's understanding of Voluntary Mitigation Actions

➤ Emphasis on transparency

- ▶ Activity Data
- ▶ Methodologies
- ▶ Emission factors
- ▶ MRV

➤ Toward development of a National Registry (Capacity Building Under Way)

- ▶ Linked to National Inventory Process
- ▶ Feeds both BAU and Mitigation Scenarios
- ▶ Facilitated by National Carbon Disclosure Programme (under development)

Use of current corporate and national data sources and statistics


Production of Crude Palm Oil 2012 - Windows Internet Explorer

http://bepi.mpob.gov.my/index.php/statistics/production/71-production-2012/298-production-of-crude-oil-palm-2012.html



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 **ECONOMICS & INDUSTRY DEVELOPMENT DIVISION**
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PRODUCTION OF CRUDE PALM OIL FOR THE MONTH OF MAY 2012
JANUARY - JUNE 2011 & 2012 (TONNES)

States	Jan		Feb		Mar		Apr		May		Jun		Jan - May Total	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
JOHOR	169,897	191,594	172,278	181,334	229,479	180,834	242,911	198,155	284,842	225,183	285,567		1,099,407	977,100
KEDAH	18,647	21,640	20,931	22,129	26,882	22,129	26,164	21,547	27,681	23,862	27,107		120,305	111,307
KELANTAN	9,861	16,033	11,180	14,853	14,791	15,754	18,255	17,646	24,396	19,254	23,133		78,483	83,540
MELAKA	8,455	8,549	9,416	7,636	13,058	7,448	13,029	8,060	13,301	7,939	13,583		57,259	39,632
NEGERI SEMBILAN	37,708	41,797	38,784	43,285	51,008	46,145	54,459	48,694	59,950	48,919	58,486		241,909	228,840
PAHANG	127,784	174,113	147,446	165,370	201,484	168,530	230,795	182,706	268,674	200,701	261,930		976,183	891,420
PERAK	129,893	128,483	125,859	136,013	163,683	134,002	159,048	138,685	177,939	144,996	178,322		756,422	682,179
PULAU PINANG	6,225	6,743	6,073	7,463	7,269	7,012	7,972	7,274	8,230	7,762	7,974		35,769	36,254
SELANGOR	39,819	44,872	39,922	45,044	51,184	47,841	52,970	50,810	57,193	53,819	55,672		241,088	242,386
TERENGGANU	24,506	29,933	26,804	28,021	33,033	29,473	32,126	30,235	44,652	34,233	43,989		161,121	151,895
P. MALAYSIA	572,795	663,757	598,693	651,148	791,871	659,168	837,729	703,812	966,858	766,668	955,763		3,767,946	3,444,553
SABAH	324,374	417,900	339,035	361,810	434,539	371,567	479,086	373,200	542,987	396,741	565,368		2,120,021	1,921,218
SARAWAK	160,748	206,637	156,580	175,398	189,960	180,522	213,136	195,610	231,951	220,326	232,006		952,375	978,493
SABAH/SARAWAK	485,122	624,537	495,615	537,208	624,499	552,089	692,222	568,810	774,938	617,067	797,374		3,072,396	2,899,711
MAI AYSIA	1 057 917	1 288 294	1 094 308	1 188 356	1 416 370	1 211 257	1 529 951	1 272 622	1 741 796	1 383 735	1 753 137		6 840 342	6 344 264

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Use of current corporate and national data sources and statistics

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http://www.seda.gov.my/go-home.php?omaneg=000101000000010101010001000010000000000000000000&ts=540

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STATISTICS & MONITORING

- Trends of RE Technology Cost
- RE Installed Capacities
 - Plants in Progress
 - Operational Plants
- RE Generation
- CO₂ Avoidance
- RE Capacity Map
- FIAT Listing

Home » Statistics & Monitoring » CO₂ Avoidance

CO₂ Avoidance

As electricity generation from renewable resources displaces the generation of power from conventional fossil fuels, the generation of RE therefore reduces the overall greenhouse gas emissions from the fossil fuel power stations connected to the grid system.

A study by PTM/DANIDA entitled "Study on Grid Connected Electricity Baselines in Malaysia" assessed the overall average emission factor for Malaysia and Sabah to be 0.69kgCO_{2e}/kWh. This was calculated using a methodology adopted by United Nations Framework Convention for Climate Change (UNFCCC) and the International Panel on Climate Change (IPCC) and is based on the combined margin for power generation.

Annual Power Generation (MWh) of Commissioned RE Installations

Year	Biogas	Biogas (Landfill / Sewage)	Biomass	Biomass (Solid Waste)	Small Hydro	Solar PV (Individual)	Solar PV (Non- individual (≤ 500 Kw))	Solar PV (non- individual (> 1 Mw ≤ 5 Mw))	CO ₂ Avoidance (tonne)
2012	0.00	0.00	26146.07	0.00	1057.13	44.39	9.97	0.00	27257.56

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What about 'Market Mechanisms'?

- Associated with the pre-Bali scenario
 - ▶ No call for emissions reductions in developing countries
 - ▶ Mitigation through CDM only
- Post-Bali
 - ▶ Developing countries undertake NAMAs
 - ▶ Credits sold to other countries cannot be counted
- Kyoto Protocol Escapees - bilateral offset mechanisms outside the Convention
- Offsets divert funds from awareness raising, piloting and research into lower emissions technologies and rationalize BAU emissions

What might lie ahead

- Attempts to Classify NAMAs to facilitate assigning definitive criteria and/or conditions
 - ▶ Domestically funded
 - ▶ Internationally funded
 - ▶ Credit generating (market mechanisms/bilateral offsets)
- Possible Guidelines for MRV of Internationally funded NAMAs?
 - ▶ Criteria/Conditions from donors/donor organizations
 - ▶ Funding type – constraints and limitations
- Possible links to National Communications, Biennial Update Reports (BUR) and International Consultation and Analysis (ICA)
- Funding conditions from the GEF – NC3 funding contingent on BUR preparation and funding?

A conceptual image showing two human hands, one above and one below, gently cupping a small, realistic model of the Earth. The background is a deep black space filled with numerous small, white stars. The hands are light-skinned and appear to be of a woman's size. The Earth is positioned in the center, showing blue oceans, white clouds, and brown/green landmasses.

THANK YOU

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