



Biomass Landscape in Malaysia & Potential Collaborations with APEC

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PRESENTATION OUTLINE

- Malaysia Biomass Industries Confederation (MBIC)
- Biomass Industry Landscape in Malaysia : Availability, Utilization, Value Chain, Supply Chain
- Policies, Strategies & Actions by Malaysian Government
- Best Practices in the Industry
- Primer Capital Sdn. Bhd.
- Potential Synergy with APEC

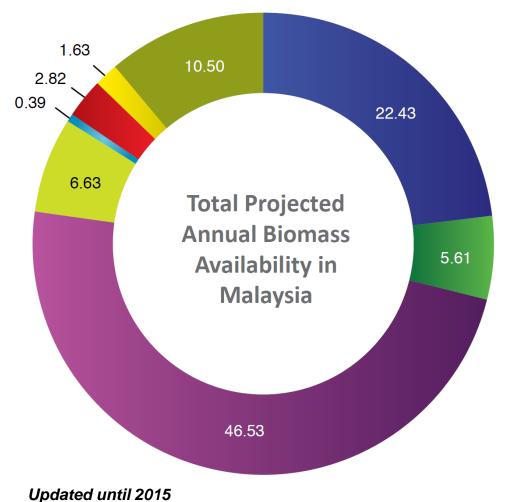
Malaysia Biomass Industries Confederation (MBIC)

- Formed in 2012 as legacy of the EU-Malaysia Biomass
 Sustainable Production Initiative (biomass-sp.net), a development cooperation programme between the European Union (EU) and Malaysian Government (2010 – 2013)
- <u>Main objective</u>: to promote a growing and sustainable biomass industry in Malaysia as well as the ASEAN region
- Seeks to represent industry players in Malaysian biomass industry especially the <u>small & medium companies</u> (SMEs)
- Strive to achieve economic and environmental sustainability in Malaysia via adoption of <u>Sustainable Consumption & Production</u> principles
- MBIC website *www.biomass.org.my*

MBIC Activities

- Annual / Biennial Biomass Asia Conference
 - www.biomass-asia.org
- Business Networking Seminars
- Publication of the biomass related reference materials i.e. Malaysia Biomass Industries Review 2015/2016
- Dialogue with Government Ministries & Agencies
 - Ministry of Energy, Green Technology & Water (KeTTHA), Malaysian Investment Development Authority (MIDA), Malaysia Green Technology Corporation (GreenTech Malaysia), Ministry of International Trade and Industry (MITI), Malaysian Palm Oil Board (MPOB), Malaysia Industry-Government Group for High Technology (MIGHT)
- Information Sessions to Bankers, Financial Institutions & Investors
 - Association of Banks in Malaysia (ABM) / Malaysian Business Angel Network (MBAN)
- Linkages with Universities & International Bodies
 - Leading Research Universities in Malaysia, China-ASEAN Technology Transfer Centre (CATTC), United Nations Industrial Development Organization (UNIDO) etc.
- Overseas Promotion of Malaysian Biomass Industry via international conferences & dialogues
 - Indonesia, Singapore, China, EU, Thailand, Korea, Japan

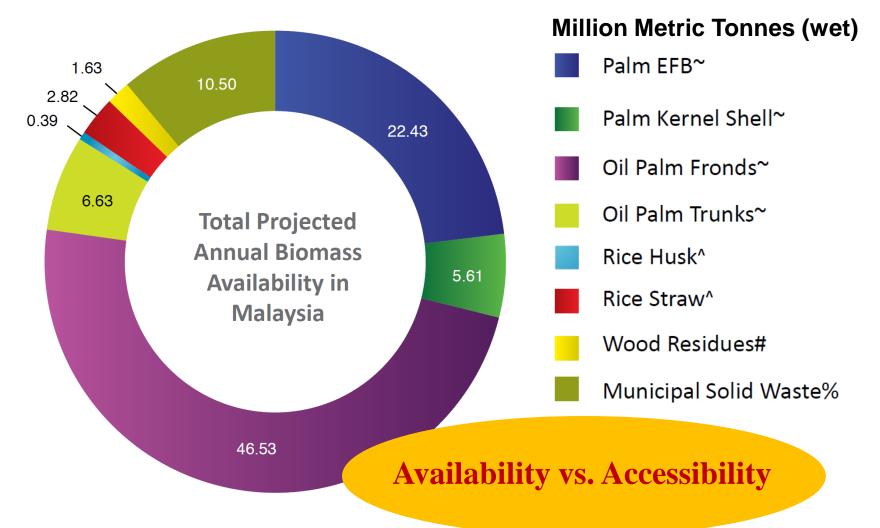
Biomass Availability in Malaysia



Million Metric Tonnes (wet)			
	Palm EFB~		
	Palm Kernel Shell~		
	Oil Palm Fronds~		
	Oil Palm Trunks~		
	Rice Husk^		
	Rice Straw^		
	Wood Residues#		
	Municipal Solid Waste%		

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Biomass Availability in Malaysia



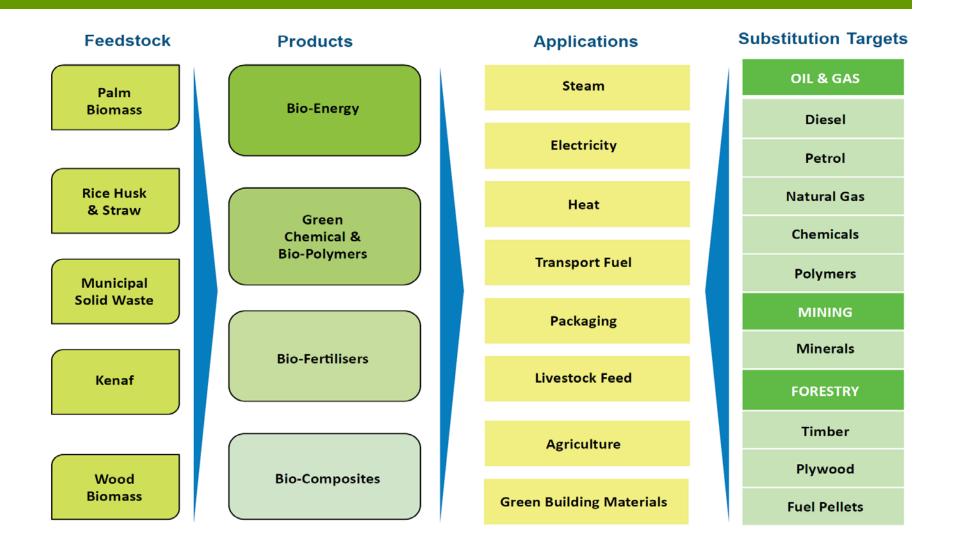
Value of Accessible Biomass in Malaysia

96.53 X 30% X RM500/MT mil.MT Accessibility Value total biomass Creation RM 14.5 bil. USD 4.4 bil. Economic Value/Year

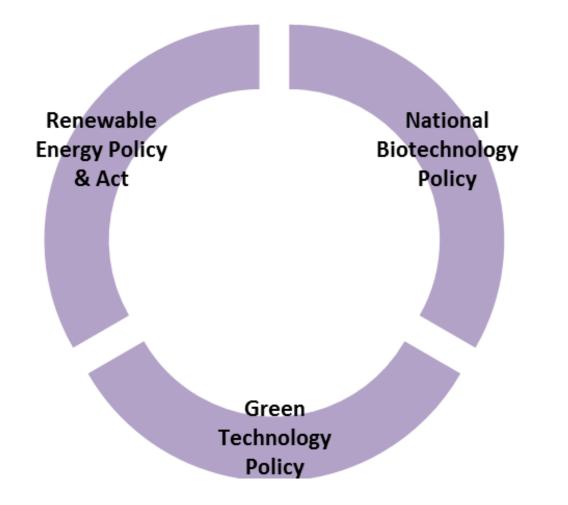
Mobilization 25 mil.tonne palm biomass

66,000 new jobs by 2020 Gross Nat. Income RM 30 bil. USD 10 bil. by 2020

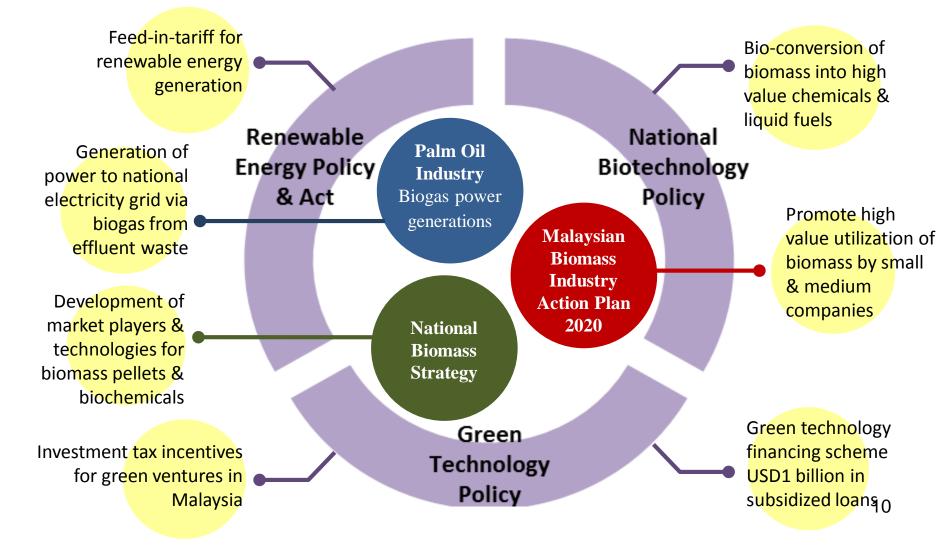
Utilization of Biomass in Malaysia



Policies, Strategies & Actions by Government



Policies, Strategies & Actions by Malaysian Government



Best Practices : Making the Business Case

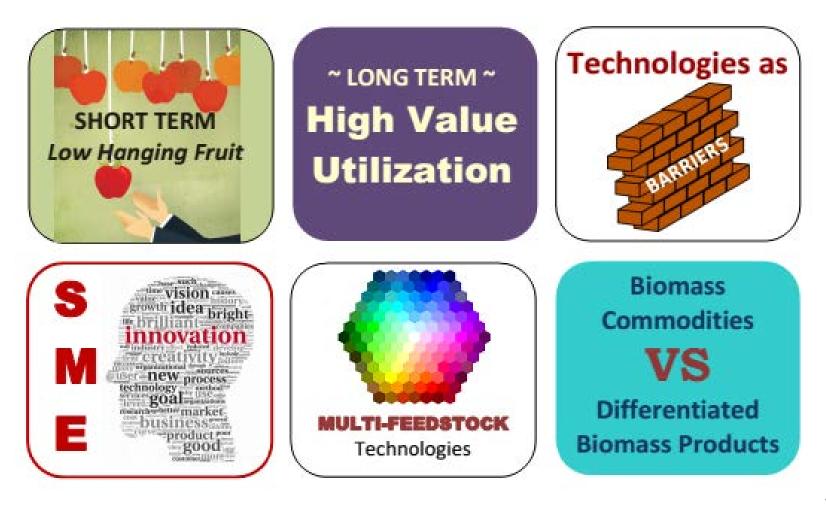
Steering gov. & biz. towards SUSTAINABLITY

BIOMASS as resource for economic green growth Sustainable Production & Consumption Agenda

Market-based Pull Policies, Strategies & Actions

Macro (gov.) & micro (biz.) levels

Best Practices : Smart Utilization of Biomass

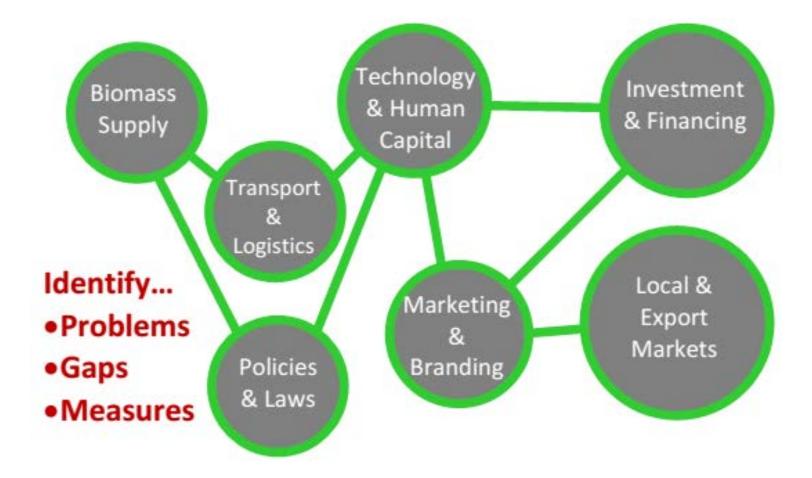


Biomass Value Chain: 4 Major Directions

		Biochemical
Bio	Eco-products	Biosugar Lactic acid
Agriculture	Pulp and paper	Polylactic acid
Biofertiliser Animal feed Composting Aqua-feed	Biocomposite Biopackaging Activated Carbon Bio-engineering	Food additives Zeolite & catalyst
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	Agriculture Biofertiliser Animal feed Composting	Bio Agriculture Biofertiliser Animal feed Composting Bio-engineering

Bio-Energy is the best approach towards mitigating climate change i.e. creating highest environmental benefits in term of Greenhouse Gas (GHG) emission reduction, but has low economic value from business standpoint.

Best Practices : Value Chain Approach





- Primer Capital Sdn Bhd. is an investment and advisory firm for innovative Green Financing Models, established in 2010.
- Involve in development of project proposals and implementation for international donors and economic development co-operations.
- Leverage on the expertise and experience prior proven investment strategies predominantly in Green Business (Renewable Energy – Solar, Biomass, Mini-Hydro and Energy Efficiency, Green Agriculture, Green Transportation).
- Created proprietary fund-raising methodology for various green business models.

What we do

GREEN FINANCE ADVISORY FOR SMEs & GREEN PROJECT DEVELOPERS

- Engaged by Biomass-SP, an EU-funded project, to provide coaching in green financing for biomass entrepreneurs.
- Engaged by Malaysia Biomass Industries Confederation (MBIC) to address the financial component for biomass projects/businesses.
- Current consultancy portfolio includes bio-fertilizer venture, clean energy and waste-to-wealth projects.

Fund-raising for Green Projects

MULTIPLE FUND-RAISING MODELS FOR GREEN PROJECTS



FINANCING ALTERNATIVES FOR DIFFERENT GROWTH PHASE



Climate Finance



© Multiple Fund-raising Solutions for Green Projects, Dato' Leong Kin Mun

Potential Synergy with APEC

MBIC

- Co-host with APEC for Biomass Energy (RE) Forum 2018 in Kuala Lumpur
- Co-host workshops and forum related to biomass / RE technology and implementation best practices in Kuala Lumpur.
- Establish an APEC resource centre for biomass industries with consolidation of regional biomass database for benefit of all APEC member economies.

Potential Synergy with APEC

Primer Capital Sdn. Bhd.

- Green Financing Facilitation for Green Energy Projects
- Workshops and Forum Focusing on Financing of Renewable Energy/Green Technology Projects with Innovative Financing Models
- Co-research / Study on Green Financing Landscape in Malaysia : Best Practices & Lessons Learnt to be replicated in other APEC economies.



Dato' Leong Kin Mun

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