

COURSE OUTLINE

PROGRAMME TITLE	Unlocking the Value of Oil Palm Biomass: A Strategic Roadmap for RSPO, ESG & Circular Economy
OVERVIEW (Brief introduction Of the topic)	The Malaysian oil palm industry generates millions of tonnes of biomass annually through plantation and milling operations, including Empty Fruit Bunches (EFB), Palm Oil Mill Effluent (POME), Oil Palm Fronds (OPF), Oil Palm Trunks (OPT), mesocarp fibre, palm kernel shell and decanter cake. While these biomass resources have traditionally been regarded as operational waste or low-value by-products, they present significant opportunities to improve operational efficiency, create higher-value products and strengthen long-term business sustainability. This executive programme provides decision-makers with a strategic understanding of how integrated biomass management and circular economy principles can transform biomass into valuable business assets. Participants will explore the business value of different biomass utilization pathways, understand how biomass initiatives can contribute to cost reduction, resource optimization and new business opportunities, and examine their role in supporting Malaysian Sustainable Palm Oil (MSPO) standards, Roundtable on Sustainable Palm Oil (RSPO) certification requirements, Department of Environment (DOE) Malaysia environmental compliance, and Environmental, Social and Governance (ESG) objectives. The programme also highlights how strategic biomass management can improve profitability, strengthen business resilience and support long-term competitiveness within the Malaysian oil palm industry. The programme also introduces a practical framework for evaluating biomass investment opportunities, prioritizing implementation strategies and developing a strategic roadmap aligned with organizational goals. By the end of the course, participants will have a clearer understanding of how effective biomass management can enhance profitability, strengthen sustainability performance, improve regulatory compliance and support Malaysia's national agenda for circular economy, bioeconomy and sustainable development within the oil palm industry.

	Industry Relevance / Focus Area Alignment This programme supports the development of strategic competencies required by Malaysia's oil palm industry in line with the National Agrofood Policy 2021–2030 (NAP 2.0), the Twelfth Malaysia Plan (12MP), Malaysia's Circular Economy and Bioeconomy initiatives. The course focuses on strengthening industry capabilities in biomass resource recovery, sustainable plantation management, resource efficiency, value-added biomass utilization, environmental compliance, and business sustainability while supporting compliance with MSPO, RSPO and DOE requirements.
LEARNING OUTCOME	Upon completion of this course, participants will be able to: 1. Explain the strategic business value of integrated oil palm biomass management and its contribution to operational efficiency, Circular Economy, RSPO, MSPO, DOE compliance and ESG performance. 2. Identify the major biomass resources generated from oil palm plantation and milling operations and recommend suitable value-added utilization opportunities for each resource. 3. Analyze and compare suitable biomass utilization pathways based on business objectives, operational feasibility, investment requirements and expected organizational benefits. 4. Evaluate biomass management strategies that support compliance with MSPO, RSPO, DOE environmental requirements and organizational ESG objectives. 5. Develop a high-level biomass transformation roadmap by prioritizing suitable biomass opportunities, implementation strategies and expected business outcomes for their organization.
DURATION (days)	0.5 day (4 hours)
TARGET PARTICIPANTS (position/level)	• Chief Executive Officers (CEO) • Managing Directors • Chief Operating Officers (COO) • General Managers • Plantation Owners • Plantation Directors • Estate Managers • Mill Managers

	• Sustainability Managers • ESG Managers • Operations Managers • Production Managers • Engineering Managers • Agronomy Managers • Business Development Managers • Technical Managers responsible for biomass utilization and resource recovery • Professionals involved in plantation transformation, sustainability initiatives and circular economy projects
COURSE CONTENT (with submodules)	MODULE 1: Understanding the Strategic Value of Oil Palm Biomass Sub-Module 1.1 – Current Challenges Facing the Malaysian Oil Palm Industry Sub-Module 1.2 – Oil Palm Biomass Resources Sub-Module 1.3 – From Waste Management to Resource Management MODULE 2: Driving Sustainability Through Strategic Biomass Management Sub-Module 2.1 – Strategic Drivers, Regulatory Requirements and Market Expectations Sub-Module 2.2 – Biomass Management as a Business Strategy Sub-Module 2.3 – Evaluating Business Value and Return on Investment (ROI) MODULE 3: Waste-to-Wealth Solutions and Business Opportunities Sub-Module 3.1 – Biomass Value Creation Opportunities Sub-Module 3.2 – Business Value Creation and Competitive Advantage Sub-Module 3.3 – Biomass Solution Pathways MODULE 4: Building Your Biomass Transformation Roadmap Sub-Module 4.1 – Assessing Organizational Readiness Sub-Module 4.2 – Developing a Strategic Roadmap Sub-Module 4.3 – Implementation Priorities and Next Steps Sub-Module 4.4 – Decision-Making Framework for Prioritizing Biomass Investments
LEARNING METHODOLOGIES	Learning Methodologies 1. Interactive Executive Presentation 2. Facilitated Discussion 3. Executive Case Study 4. Group Activity 5. Business Opportunity Mapping Exercise

	6. Executive Strategy Workshop 7. Reflection Exercise 8. Question & Answer
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