



PROJECT PROGRESS SHEET SUSTAINABLE PRODUCTION (SP) OF THE BIOMASS INDUSTRIES IN MALAYSIA: OPTIMISING ECONOMIC POTENTIAL AND MOVING TOWARDS HIGHER VALUE CHAIN



- Legend**
- Eligible countries where SWITCH-Asia projects are implemented
 - Eligible Asian countries for the SWITCH-Asia programme
 - Non-eligible Asian countries for the SWITCH-Asia Programme
- Project implementation area
- City
 - Region
 - Country

The boundaries shown on this map do not imply on the part of the European Union any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.



**BRIEF PROJECT
DESCRIPTION**

The project Sustainable Production (SP) of the Biomass Industries in Malaysia: Optimising Economic Potential and Moving Towards Higher Value Chain (Biomass-SP) aims to develop the biomass industry based on the principle of sustainable consumption & production (SCP) via the enhancement of supply chain and uptake of biomass utilisation projects by the Malaysian SMEs and other biomass stakeholders. Biomass has great potentials to be used for production of green products and generation of renewable energy which adds value to the clean development mechanism (CDM) activities in Malaysia. The project intervenes with greater market access / green supply chain / public procurement opportunities from the EU. It is expected to spur the green technology sector in Malaysia, contribute to global climate mitigation effort and create social profit to the environment.

Up to date, the project had conducted an EU-Malaysia Biomass Stakeholders Forum and Knowledge Exchange Session with the biomass stakeholders from various sectors, i.e.; energy and non-energy, to gather useful inputs including information on concerns, constraints, best practices and way forward of the Malaysian biomass industry. To increase the project visibility, seven Awareness Road Show Seminar (ARSS) were held across seven states in Malaysia to disseminate project information and the EU-Malaysia Biomass Entrepreneurs Nurturing Programme (EUM-BENP). Besides that, the project exhibited and invited as speakers in biomass-related events organised by the government and industry, to reach out to more stakeholders. We also undertake the selection of 50 SMEs in the EUM-BENP, with objective evaluation.

PROJECT PARTNERS

Malaysian Industry-Government Group for High Technology (MIGHT)
European Biomass Industry Association (EUBIA)
Danish Technological Institute (DTI)
Association of Environmental Consultants and Companies Malaysia (AECCOM)

PROJECT WEBSITE

www.biomass-sp.net

PROJECT ABBREVIATION

Biomass-SP

PROJECT DURATION

January 2010 - December 2013

TARGET GROUPS

- SMEs in the biomass supply chain i.e. wood and fibre-based products manufacturing; eco-friendly products (bio-plastics, bio-composites, bio-fertilizers etc) manufacturers, exporters; solid waste management and solutions / service providers, entrepreneurs (commercialisation / renewable energy), traders / supplier of biomass, technology licensors and licensees. The participation from this target group creates multiplier effect towards the climate change mitigation ; Environmental professionals (engineers / consultants / contractors & patent agents, industrial designers) as well as the project partners. Knowledge contribution from this target group will be directly involved in the implementation of project activities to achieve project objectives.
- Government agencies, research institutions and universities (RIUs) and financial institutions (FIs) involved in promoting biomass industry and have the authority in policy intervention.

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OUTPUTS UNTIL DECEMBER 2010 TO BE SHARED WITH WIDER AUDIENCE



The project had developed a project website, www.biomass-sp.net, containing the project information and also serves as an online enquiry centre for international / local stakeholders to reach the project team. The project updates, activities, biomass-related news and upcoming events are also highlighted on the website. The project aim to make [biomass-sp.net](http://www.biomass-sp.net) a focal point for Malaysian biomass industry. The first edition of a project brochure, with 4 pages is also developed and printed in 5000 copies for stakeholder distribution during the ARSS and exhibitions of which the Biomass-SP team participated in. For

better visibility at the exhibition booths, 200 copies of posters are also printed. The brochure can be downloaded from the website. The project also placed a number of printed advertisements on the local newspapers to disseminate information on the project activities and the results were satisfactory with the turn-up on the event days. On the EUM-BENP initiative, the project has developed a format for pre-selection of SMEs to participate in the initiative. The form is available upon logging in on the project website. For further questions, please contact the Project Manager, Ms. Lee Jia Jing at leejj@biomass-sp.net.

RESULTS ACHIEVED TILL JANUARY 2011

With the seven Awareness Road Show Seminar (ARSS), the project managed to reach out to more than 800 stakeholders and more than 200 stakeholders via participation in exhibitions organised by the industry and government. Besides disseminating project information, the purpose of this outreach exercise is to promote the EUM-BENP initiative among the biomass SMEs; the project will select 50 SMEs to be coached to improve the business and environmental performance with various capacity building programmes (CBPs) and advisory advice. The selection is conducted in an objective and transparent manner. Among the coaching services offered are:

- Access to Government Grants / Soft Loans / Investment Incentives / Venture Capital / Project Financing Mechanisms
- Business Partnerships and Collaboration with EU Companies through Business Match-making Event
- Commercialisation of Local Biomass Technologies / R&D
- EU Green Procurement Standards and Specifications / EU Market Access Opportunities
- Clean Development Mechanism (CDM)
- Carbon Footprint Measurement
- ISO 14001 Environmental Management System or Other Equivalent Environmental Certifications



The project actively spreads the information concerning the importance of SCP to Malaysian biomass SMEs and introduction of green procurement opportunities by the EU, which eventually contribute to the climate change mitigation effort. When the SMEs are equipped with enough awareness and knowledge on the benefits of SCP implementation, then replication of SCP can be materialised.

The project very much focused on the outreach programme throughout Month 1 to Month 12, starting from Month 13, the project will concentrate in the improvement of business and environmental performance of SMEs via project initiative, such as EUM-BENP and CBPs.

Biomass-SP organised an EU-Malaysia Biomass Multi-stakeholder Forum and the Knowledge Exchange Session in April 2010 to gather inputs from the Malaysian stakeholder and compile the ideas and concerns in the EU-Malaysia Biomass Stakeholder Report as a reference docu-

ment to government for policy formulation of the New Economic Model (NEM) related to biomass sector. The project constantly seeks opportunity to build good contacts with government departments and agencies such as Office of Science Advisor – Prime Minister Office, Ministry of Energy, Water and Green Technology (KeTTHA), Ministry of Science, Technology and Innovation (MOSTI), SME Corporation, Central Bank of Malaysia, Malaysia Venture Capital Management Berhad (MAVCAP), Malaysian Biotechnology Corporation (BiotechCorp), Malaysian Timber Industry Board (MTIB), Economic Planning Unit (EPU) and Malaysian Palm Oil Board (MPOB). The project website will constantly feature any update in local development on SCP, green technology and biomass sector, to keep the SMEs informed of the current affairs in the biomass sector.

LESSONS LEARNT SO FAR



Part of the main objective of the outreach programme is to search for the best 50 biomass SMEs to be included in EUM-BENP. EUM-BENP provides a selection of comprehensive coaching services to SMEs, specified in section above. The challenge lies in selecting the good quality SMEs to be included in the EUM-BENP initiative as the SMEs are all different in terms of financial & technical background, re-sources and business model constraints. Therefore, the confirmation of selected 50 SMEs is taking longer than expected. Several discussion sessions were held to obtain more information about the SMEs who submitted their interests to participate in EUM-BENP. Along the implementation of project, the project team is constantly improving the project activities executions, to adapt to the latest know-

ledge/information, core competencies, contacts and synergise with government's financial facilities for SMEs to kick-start implementation of SCP. These attributes could come from the other training seminars/events and also through networking that the project participated in. The adaptation is crucial to achieve specific objective via enhanced strategies and adopt risk management model. The project has taken potential financial, environmental and economical risks as intervened areas with relevant mitigation measures. Although some outcome may not be as desirable, but the negative impact can be minimised with proper risk management.

There is no significant hindrance encountered during implementation of the Biomass-SP project so far and it is still too early to identify



the impact assessment on the stakeholders as the capacity building programmes and EUM-BENP are just about to commence. On the other hand, the Government remains as the significant stakeholder since they are the policy-maker who would make far-reaching impacts on facilitating SMEs to engage in SCP activities. Among the assistance provided by the Government up to date are soft loans like, Green Technology Fi-

nancing Scheme (GTFS), Working Capital Guarantee Scheme (WCGS), pre-commercialisation and commercialisation grants, tax incentives etc. The project management team did not find any difficulty in establishing local participation / ownership in the project up to this point of time.

OUTREACH AND SYNERGIES



The project is benefiting from prior project management experience in the EU-Malaysia Biotechnology Business Partnership (www.eumbio.org) project which was funded under the EU-Asia Invest Programme in 2007 and championed by MIGHT. The project also leverages on European Biomass Industry Association (EUBIA)'s extensive experience and best practices in the biomass sector especially bioenergy and pellets in terms of technology, market access, business models, financing, etc. The project is also planning to seek synergy from the current SWITCH-Asia projects i.e. the ASEAN Energy Manager Accreditation Scheme (AEMAS). This project aims at reducing energy consumption, and thereby reducing greenhouse gases (GHGs). One of Biomass-SP's objectives is to contribute to the climate change mitigation effort, and GHGs reduction is also an effective way of mitigating global warming. We plan to invite AEMAS to speak at conference or capacity building programmes organized by Biomass-SP in future.

The project results will be presented through various international platforms such as United Nations initiatives for replication purposes. The website, also serves as a very good vehicle to disseminate relevant information to target groups. The project foresees that Biomass-SP objectives have linkages to the Economic Transformation Programme (ETP) and the New Economic Model (NEM) championed by the Prime Minister De-

partment. If the model of this project is proven successful, the continuity of the project may be made possible by requesting additional budget from the Malaysian Government. The Ministry of Energy, Water and Green Technology (KeTTHA) also championed the Malaysian Green Technology Policy of which the Biomass-SP can leverage on. The capacity building provided to the Small and Medium Enterprises (SMEs) will enhance their capacities and will eventually be direct implementer to improve the environmental performance. This will be tangible in terms of certification on ISO 14001 Environmental Management System (EMS) and the CDM project collaboration established between local project promoters and CDM project investors and carbon credit buyers from Europe.

Project brochures and website, www.biomass-sp.net were developed to disseminate information to biomass stakeholders, featuring updates of project activities, local news & announcements related to biomass and project publications collection etc. Awareness Roadshow Seminars across Malaysia are also held to reach out to local SMEs on the project objectives and how they can effectively tap the project facilities. The project management team have taken part in several biomass-related exhibitions locally and been invited to speak at international conferences in Malaysia, Singapore and Indonesia. Biomass-SP has established cooperation with



EUBIONET III, under the Intelligent Energy Europe Programme. The project is publishing a page consisting excerpt taken from the articles produced by EUBIONET III. The project team is very committed to intervene that the project objectives are achieved guided by the principle "Management by Objective" and Objectively Verified Indicators (OVIs). Risk assessment is also carefully reviewed to ensure that the OVIs are met. To secure the commitment of the selected SMEs in the EU-Malaysia Biomass Entrepreneurs Nurturing Programme (EUM-BENP), these SMEs

are required to declare their Environmental Performance Plan (EPP), linking SCP to their business model throughout the project life cycle. Improved environmental and business management capacity of the SMEs will lead to successful green ventures.

The local stakeholders i.e. SMEs, Research Institutions and Universities (RIUs) or relevant authorities, are aware of Biomass-SP's existence given news coverage of over 20 times in various newspapers.

ADDITIONAL HIGHLIGHTS OF THE PROJECT

The outreach programme planned in the proposal was targeting at 500 stakeholders, but through the seven Awareness Road Show Seminars across seven states in Malaysia and various exhibitions, the project managed to reach out to more than 800 stakeholders. 121 biomass SMEs submitted their preselection form to participate in the EU-Malaysia Biomass Entrepreneurs Nurturing Programme (EUM-BENP). The project continues to participate in Malaysian and regional biomass conferences, trade shows and exhibitions to reach out to more target groups, i.e.; investors, traders, researchers, technology providers and project promoters, for enhancing collaborations with local SMEs.

Many SMEs have great ideas to implement SCP based green ventures but most of the commercial banks are quite hesitant to extend fi-

nancing facilities for such projects even though the said green technology projects have been endorsed by the Malaysian Government. On the



Biomass-SP has captured the attention of Malaysia leading English newspapers, News Straits Times and was featured in their Business Times section on 23 July 2010.



other hand, Malaysian Government has also established specific debt financing facility i.e. Malaysia Debt Venture Berhad (MDV) to offer non-collateral based green project financing. A major biofertiliser CDM project has received such pioneer financing in Malaysia from MDV.

From the effort of constant outreach exercise and awareness of project branding, Biomass-SP has captured the attention of CDM investors, who are aggressive at investing for palm oil mill effluent (POME) / biogas from methane capture projects, as well as biomass power plant project and offer very attractive business terms for equity participation in such CDM projects. The project also was approached by government agencies such as Fibre and Biocomposite Development Centre (FIDEC), Palm Oil Industrial Cluster (POIC) Sabah, Centre for Management Technology (CMT) Singapore Limited and the Italian Trade Commission in Malaysia to explore further synergy. CMT extended two invitations to Biomass-SP to speak at their international conferences in Jakarta (2010) and Rotterdam (2011), which helps

Biomass-SP to generate good contacts with biomass investors, buyers and technology providers from the European Union (EU) and Asia.

Biomass-SP has also made special effort to increase its visibility and outreach impacts through presenting papers at regional green events such as Carbon Forum Asia 2010 in Singapore (organised by International Emission Trading Association) and Bioenergy International Expo and Conference 2010 in Kuala Lumpur (organised by Biofuels International). This enabled the project to enhance business contacts with CDM project investors and regional SMEs in the bio-energy sector.

The project is also capturing the attention of Malaysian Timber Industry Board (MTIB), Malaysian Palm Oil Board (MPOB), Forest Research Institute Malaysia (FRIM) and Palm Oil Industrial Cluster (POIC) of Sabah and these authorities have participated at the stakeholders consultative activities and established good contacts with the project team for future synergy.



ARSS in Kuala Lumpur was attended by over 400 stakeholders in Kuala Lumpur on 30 September 2010.