

Malaysia's Economic Transformation Programme and Climate Change Mitigation for the Oil Palm Industry

Outline

- Economic Transformation Programme
- National Key Economic Areas
- Palm Oil Sector and Climate Change Mitigation Strategies
- Conclusion

Economic Transformation Programme

- Launched in 2010 (Programme from 2011-2020)
- High Income Nation by 2020
- Gross National Income per capita from USD6,700 in 2009 to USD15000 in 2020
- GNI Growth of 6% per annum

Importance of Sustainability in ETP

- High Income
- Inclusiveness – benefit all Malaysians with special attention on bottom 40% of households (increase monthly mean income from RM1440 in 2009 to RM2330 in 2020)
- Growth must be sustainable in economic and environmental terms -preservation of environment and resources must be priced in the cost of development

National Key Economic Areas (NKEA) Under ETP

- 12 NKEAs will drive economic activity
- Portfolio of NKEA Sectors will evolve over time
- Slow moving sectors may be removed and emerging sectors added

Implication of being Included as NKEA

- Prioritised Government Support

  - Funding

  -Top talent and Prime Minister's attention

- Policy Reforms to remove barriers to competition and market liberalisation.

Incremental GNI

National Key Economic Area	No of EPP	Incremental GNI (RM billion)
Oil, Gas and Energy	12	131
Palm Oil	8	125
Financial Services	10	121
Tourism	12	67
Business Services	8	59
Electronics and Electrical	11	53
Wholesale and Retail	15	108
Education	13	34
Healthcare	6	35
Communications Content and Infrastructure	10	36
Agriculture	16	29
Greater Kuala Lumpur and Klang Valley	10	392

Palm Oil Sector NKEA

- 4th Largest contributor to national economy
- GNI of RM53 billion to increase byRM125 billion to RM178 billion by 2020

Palm Oil strategies and EPPs

Value Chain	EPP No	EPP
Upstream Productivity and sustainability	1	Accelerate replanting
	2	Improve Fresh fruit Bunch yield
	3	Improve worker productivity
	4	Increase Oil Extraction Rate
	5	Biogas facilities at Palm oil Mills
Downstream Expansion and Sustainability	6	Developing Oleo Derivatives
	7	Commercialising 2 Generation biofuels
	8	Food and Health based sectors

EPP1: Accelerate Replanting of Old Palms

- Backlog of 365,414 ha old trees 25 years and above
- 125,610 ha a year due for replanting
- RM1 billion in public funding and RM3.4 billion in private funding required.

EPP2: Improving Fresh Fruit Bunch Yield

- Promote, mandate and Implement Best Agricultural Practices
- Cluster Smallholders into cooperatives, recruit 493 extension officers
- Average FFB yield from 19.2 tonnes/ha/yr to 26.2 tonnes/ha/yr

EPP3: Improving Worker Productivity

- Scaling up mechanisation through use of motorised sickle harvester (Cantas)

  -from 1.5 tonnes/worker/day to 2.8 tonnes/worker/day
- Using buffalos for fruit bunches collection where mechanisation not feasible – 40% increase in productivity

EPP4: Improving Oil Extraction Rate

- Identify low performance mills
- Improving extraction efficiency at mills through good milling practices and replacement/upgrading of boilers and equipment
- Station enforcement officers at mills to ensure only ripe and quality fruits processed
- OER from20.5% to 23% by 2020

Climate Change Implication of EPP1 to EPP4

- Oil yield per hectare increases from 4 tonne currently to 6 tonnes in 2020
- Reduces the need to clear new land in Malaysia or elsewhere for oil palm production
- Reduces greenhouse gas emissions from release of stored carbon from land use change

EPP5: Developing Biogas at palm oil mills

- To encourage all palm oil mills to install biogas facilities by 2020
- To encourage use as energy source for internal use and to supply to national electricity grid
- To increase feed in tariff rate

Methane from Palm Oil Mills

- Methane is a greenhouse gas 21 times global warming potential of carbon dioxide (CO_2) contributes to global warming
- Can be used as fuel → reduces carbon footprint



Current Biogas Projects

Status	Number of Palm Oil Mill
Plant in operation	25
Under construction	6
Under planning	52

Biogas Capture from POME

United Plantation Berhad - Jenderata Palm Oil Mill, Perak
-Internal consumption

Bell Eco Power Sdn. Bhd., Batu Pahat

Climate Change Implication of EPP5

- Biogas from mills contain 65% methane and 35% carbon dioxide
- About 17 million tonnes of CO_2 eq can be avoided

EPP6: Developing Oleo Derivatives

- Public funding of RM508 million and tax incentives of RM84 million
- Private investment of RM10.2billion
- Oleo products generally entail less GHG emissions than their petrochemical equivalents

EPP 7: 2nd Generation Biofuels

- Fast-track using 60 million tonnes of oil palm biomass comprising mainly empty fruit bunches to produce 2nd generation biofuels
- Initial stage- bioils, later to transportation fuels
- Reduce GHG emissions as compared to fossil fuels

EPP 8: Growth in Food and Health based Segment

- Currently upstream products make up 81.5% of palm product exports, non food downstream products 14.5% while food/health products only 4%
- Public funding of RM1.4billion over 10 years

Business Opportunities

- Biodiesel utilisation through B5 programme to be implemented in central region of Peninsular Malaysia in June 2011
- When extended nationwide, will utilise 500,000 tonnes biodiesel per annum
- GHG emissions reduction of 1.5 million tonnes CO2eq a year

Conclusion

- Malaysia's economic transformation programme, while focusing on increasing GNI, also places equal importance on sustainability
- The palm oil sector is an important component in the Malaysian economy and is equally committed in implementing climate change strategies under the ETP

THANK YOU