

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.0 Conclusion

Extended Producer Responsibility (EPR) is being practiced by all the 10 multinational companies interviewed in electronic industry throughout Malaysia. The application of EPR principle has been applied for targeted e-products in each company. In response to increasing level of e-waste, companies interviewed has initiated take-back activity as an opportunity to foster green image, as well as, to provide improved services to their customers. The environmental performance of products subject to EPR has improved particularly in product recycling, product design and materials reduction.

Data generated from Expertchoice shows that Company F headquartered in United States of America (U.S.A), prioritizes Environmental stewardship (21%), Company G in Product Innovation (19%), Company B in Take-back (22%), Company E and H in Green marketing(21%), Company C and D in Cost savings (22%) and Company A in Customer satisfaction and loyalty (22%). Overall, based on evaluation from Expertchoice, Company A and B have been the top two companies in adopting an efficient EPR practice based on all factors evaluated.

Level of awareness and knowledge on EPR among management of the industry has been at a moderate level. Several staff of the management have acknowledged EPR in raising awareness for end-of-life issues, although, there are also certain drawbacks perceived. They strongly agree that the government needs to improve collaboration

among stakeholders or management with the public in order to enhance awareness on EPR.

Knowledge and awareness of public towards EPR and take-back programme have been significantly low. From the respondents interviewed, more than 70% are still not aware on both EPR and take-back programme in Malaysia. Majority who are aware consists of students in higher institutions, as well as, those working in private sectors. Most of the respondents suggested campaigns and exhibitions to increase the level of awareness among the public. They strongly believe that it should be initiated at an early stage of education. From the public survey, education definitely plays a vital role in teaching the respondents on EPR and take-back.

5.1 Recommendations

Several key recommendations could be drawn out from the discussion with the stakeholders to consider when an EPR approach has been selected. These applies to all government interventions and other actors involved, regarding issues related to EPR and E-waste management.

- i) **Targets cleared.** The established targets should be transparent and acceptable among the stakeholders.
- ii) **Financial incentives.** Producer have a larger influence towards product design. The waste management costs provide clear incentives to change product design.
- iii) **Neutrality in EPR approach.** The EPR programme should have a neutral effect and designed in such a way.
- iv) **Materials differentiation.** The incentives should contribute towards material utilized(raw materials) which gives change product design.

v) **Different product group solutions.** In decision-making process of a product, different aspects and factors need to be evaluated between short-life and long-life product.

vi) **Consumer participation.** Environmental concern and information dissemination are important factors of EPR Programme. Consumer participation is vital in EPR programme that its barriers should be minimised. The awareness can be created through media in particular. There is a need for the manufacturer to dedicate funds to the promotion of the take-back scheme.

vii) **Monitoring.** Monitoring is important to realize the desired benefits and importance of EPR approach.

viii) **Recycling costs to be minimized.** A feedback system in determining data on recycling and dismantling operation costs should be provided. This is important in determining areas for improvement.

There is still a need for further research on the adoption of EPR into national legislation and its impact towards e-waste. With this, there should be an in-depth research on how various e-waste management strategies can be synergised with EPR.