
Concept paper submitted for presentation at the
2nd Accounting Research & Education Conference (AREC) 2012
Doctoral Colloquium
Universiti Teknologi Mara
21 February 2012

Loo Choo Hong
PhD Candidate
University Tun Abdul Razak, Kuala Lumpur, Malaysia
Supervised by
Prof. Dr. Barjoyai Bardai

Faculty member
Wawasn Open University
Penang, Malaysia
10 January 2012

Abstract

This concept paper presents a proposal support a research on the acceptance of best practices of environmental taxation in Malaysia. The paper opens with an outline of the research and presents the objectives, research focus and questions and outline of the chapters of the research. Next the paper looks at the research methodology of the research by showing the hypotheses, models and phases of the research to be conducted.
Part 1: Objectives and Questions of the Research

1.1 Introduction

The international community have been very seriously looking at environmental degradation since the 1980s with issues pertaining to the thinning of the ozone layer, global warming, the disappearance of many animal and plant species. Various measures and tools have been developed by governments and the public to elevate the issues related to environmental degradation. Some measures are voluntary- like not eating shark-fins and others were exercised using the power of the law such as tolls when entering city limits. Taxation is a tool that the government uses both to collect revenue but also to prevent and encourage certain behaviour. As taxation is monetary in nature, it is a good way to encourage or discourage a country’s citizen to behave in a certain way as deemed appropriate by the government. Throughout the world taxation is used as a means to encourage good environmental practices and to dissuade the citizens of a country from practices that could further damage the environment. The OECD defines environmental taxes as “taxes which have been introduced to achieve a specific environmental objective, and explicitly identified as environmental taxes and taxes which were introduced initially for non-environmental reasons, but which impact on environmental objectives, and which may be increasingly modified or reduced for environmental reasons.” (as cited by Schofield (2009).

Taxation in Malaysia encompasses both direct taxation, indirect taxation and local government taxation. The main laws governing taxation in Malaysia are the Income Tax Act 1967, Real Property Gains Tax 1976, Promotion of Investments Act 1986 and Stamp Duty Act 1949, various custom laws and the some sections local government laws and also Case Law. Apart from the aforesaid taxes, the government might receive some revenue from non-tax revenue which is government revenue not generated from taxes.

Malaysian law, including tax law, due to historical connections to British Colonial History, is based on the British Common Law system as it evolved in the United Kingdom [UK], Australia and India. The Malaysian legal system, due to the colonisation of Malaya, Sabah and Sarawak, by the UK between early 1800s and 1960s, provides a basis for the common law legal system. The Malaysian Tax system, a subset of the Malaysian legal system, also acknowledges cases from UK dominions such as Australia, Hong Kong and India. The Income Tax Act 1965 is based on British, Australian and Indian models.

Since independence, case laws from the Commonwealth may have influenced the law makers in Malaysia; however Malaysian Laws are derived from Parliament and from the decisions of the local courts. It has been shown earlier that Britain had a comprehensive
structure of environmental taxation law as a result of the requirements of the European Union membership. Due to the need to move its economy from an agricultural base to a manufacturing base, in the post independence years, Malaysian taxation laws had moved in tandem with that need. Various tax incentives such as Reinvestment Allowances, Accelerated Capital Allowances, Investment Tax Allowances and Pioneer Status concentrated on the manufacturing sector.

Environmentalism in Malaysia came into the picture to a certain degree in the earlier 1970s but mostly in the 1990s due to the pressures of environmental degradation—especially the ozone layer. As a mode to carry out government policy, taxation laws were amended to suit the evolving policies of the day. The greatest changes come about in the 2010s era as the country gears itself to suit its policies towards the Kyoto Protocol in which it is a signatory.

This study looks at one of the many tools to promote sustainability i.e. environmental taxation. The whole citizen will benefit from this study as the outcome of this study is a comprehensive set of Malaysian environmental tax laws which encourages the protection of the environment and being acceptable by the majority public. This research will focus on the review of the current Malaysian tax laws dealing with the issue of environmental tax as compared to comparable practices of environmental tax in selected Commonwealth countries and other non-Commonwealth countries. The research will identify the gaps between current Malaysian tax laws and the current practices in the countries reviewed as well as the wish list of the Malaysian taxpayer which has not been addressed by the practices of other countries. Previous research done by other researchers examine in detail specific sections of the environmental tax law. As tax laws are inter-related, there is a need to look at the laws as a set, rather than examine sections of the laws.

The urge to do this research is to find out:
1. Whether Malaysian public think that there is a need for Malaysia to have environmental tax laws which is able to encourage the populace to protect the environment and practice sustainability.

2. Whether the Malaysian public think environmental tax laws should also be made current to include the latest developments internationally especially in the Commonwealth, the United States of America [USA] and other United Nation members.

3. Whether the Malaysian public think that there is a need for Malaysian to have environmental taxation laws that discourage environmental degradation.
The first part of this study is aimed at identifying the gaps between the current tax laws which comprise the Income Tax Act 1965 and its amendments, Custom Acts and local governments against the laws of selected Commonwealth countries, The USA and also a wish list from selected samples of the populace on matters concerning environmental tax. The sample of the populace will include business people, manufacturers, politicians and the layman.

**Best practices may or may not be accepted by the populace.**

The second part of the study will look at whether the various gaps identified by the comparison of Malaysian taxation law and the selected Commonwealth and non-Commonwealth counterparts can be accepted by the Malaysian taxpayer. The American system will also be looked at due to the amount of studies done on this matter and due to the American legal system still in spirit practice the Common Law system even if their case laws are not binding or persuasive to the Malaysian Legal System. Even though non-Commonwealth laws such as European Law are not binding or persuasive to the Malaysian Legal system, Malaysia, as a signatory environmental treaties such as the Kyoto Protocol and the United Nations Framework Convention on Climate Change (at 1992 Rio Summit), should adopt the best practices from these countries. The acceptance wish list for tax reform by the expert panel interviews mentioned earlier will also be tested here.

### 1.2 Objectives

The following **Research Objectives** will be addressed in the study:

1. To examine the overall acceptance of the public on the introduction of a full fledge set of environmental taxes in Malaysia

2. To examine which forms of environmental taxes are acceptable to the Malaysian taxpayer

3. To examine which forms of environmental tax incentives are acceptable to the Malaysian taxpayer

4. To explore the possibility of implementing some substantial environmental tax practices currently applied in the other parts of the world into the Malaysian scenario.
1.3 Research focus and questions

This research plans to bring some light on the following questions:

1. Does the Malaysian taxpayer think that changes in the Malaysian tax law will be able to improve the quality of life in Malaysia?

2. Are the Malaysian taxpayer committed about having a full fledge set of environmental tax laws implemented?

3. Are the motives of the current Malaysian tax law easily understood by the Malaysian public?

4. Does the Malaysian taxpayer appreciate the motive and intent of implementing a full fledge set of environmental tax law?

5. Are Malaysians able to accept the changes to tax laws that are in line with international practices?

6. What are the gaps between the current Malaysian tax laws and current tax laws in select Commonwealth countries or other non-Commonwealth countries?

7. What are the types of environmental taxes preferred by the Malaysian taxpayer?

8. What are the types of environmental incentives preferred by the Malaysian taxpayer?

9. What are the new tax instruments and incentives practiced in the developed countries that maybe acceptable to the Malaysian taxpayer?

From the above questions, the researcher plans to focus this study on the following:

1. To evaluate the level of acceptance of environmental law as a means for creating a scenario of environmental commitment in Malaysia

2. To identify the best environmental practices that ought to be included in Malaysian tax laws
3. To analyse how various motivating, organizational and impeding factors influence Malaysian tax laws, thus creating a scenario of environmental commitment with the Malaysian taxpayer

4. To utilize the data to identify strategies to increase the level of environmental commitment in Malaysia using environmental tax laws

1.4 The possible outcome and contribution

As this research looks at updating current Malaysian tax laws with the best practices from all over the world and also incorporating the wish lists of various Malaysian taxpayers, this research could guide the public policy developer in developing the most appropriate environmental tax laws for use in Malaysia.

Apart from the application point of view of this research, this study explores the social science side of taxation through environmental tax which is a subset of taxation. This research hopes to enhance the understanding on how tax laws, through environmental tax, can enhance the quality of life of its citizen. The normal thought about taxation is that the government takes away the income of its citizens through a compulsory payment and this may not improve the quality of life. We theorised that by preventing a certain bad behaviour (i.e. taxing environmentally unfriendly efforts) the result is the establishment of good behaviour (i.e. being more environmentally friendly). In this study we will prove whether this is true or not in terms of environmental tax in Malaysia.

Motives of the public policy implementer and implementee (the taxpayer) when it comes to environmental tax will be explored. Firstly, when Malaysians get themselves involved in environmental commitment initiatives is it voluntary due to the love of the environment or is it forced upon due to local and foreign pressures. Is it because the government forces them? Or is it simply to export, the exporters reluctantly obliges their principle by having environmentally friendly laws or products? The outcome of this research question is useful in understanding the motivation of Malaysians regarding social responsibility. Is it something inbound or something forced out or simply Malaysians don’t care?

Taxation is one common public policy tool. Behind every policy lies some motive of the implementer i.e. the Government. Are the motives of the current set of Malaysian tax laws easily understood by the Malaysian public? Are these tax laws understandable or something there is forced upon. From this study, the results can be applied to other studies of Malaysian public policy. Are the motives of a certain tax policy understandable? Or is the public complying with the law blindly as they are being forced upon?
These days’ people talk about adopting the best practices in their work and their life. Again when dealing with taxation are the people of Malaysia able to accept the changes to tax laws that are in line with international practices? Again sometimes the best practices could bring hardship to them. More taxes could result in the drop of their after-tax income. Are Malaysians able to sacrifice their income for the betterment of their lives? Again the results of this study can be applied to any future public policy study which deals with the application of best practices and the readiness of the public to accept the practices.

**Part 2: Research methodology**

2.1 **Hypotheses**

Continuing from the research objectives and research question as above, the following hypotheses that will be explored:

<table>
<thead>
<tr>
<th>No.</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>The Malaysian taxpayer welcome the introduction of a full-fledged set of environmental taxes.</td>
</tr>
<tr>
<td>H1a</td>
<td>The Malaysian taxpayer is committed to have a full-fledged environmental tax set being introduced.</td>
</tr>
<tr>
<td>H2</td>
<td>The Malaysian taxpayer foresees that the result of environmental commitment is an improvement to the quality of life.</td>
</tr>
<tr>
<td>H3</td>
<td>The Malaysian taxpayer is happy about the current set of environmental taxes.</td>
</tr>
<tr>
<td>H4</td>
<td>The Malaysian taxpayer understands the motives behind environmental taxation laws.</td>
</tr>
<tr>
<td>H5</td>
<td>The Malaysian taxpayer is able to accept the changes to environmental tax laws according to international practices.</td>
</tr>
</tbody>
</table>
2.2 Conceptual framework

This researcher proposes this model for this research which is as follows:

Environmental taxation acceptance model
The Environmental taxation acceptance model is inspired mainly by the writings of Chen, Bao and Zhu (2006), Thalmann (2003), Qian and Chan (2010) and the framework of Graci (2008). Although Graci’s theoretical framework deals with environmental protection in the hospitality industry, her theoretical framework becomes an inspiration for the framework of this study.

Figure 1 shows the overview to this proposed model. “Death and taxes are inevitable”. Taxpayers in Malaysia (whether the laymen or the businessman) have to comply with tax laws of the country (including environmental tax laws). There are three ways the taxpayer complies to environmental tax laws.

1. Voluntary compliance

   As mentioned by Qian and Chan (2010), the goodness in man will result in the voluntary compliance of the environmental tax laws because the laws encourage good behaviour.

2. Forced compliance

   The second type of taxpayer is the ones who will comply to the laws because they are forced to comply. Nyborg’s (2010) research suggested that environmental tax makes it very costly to be not environmentally friendly. The tax makes individuals more prone to keep, or reinforce, their environment friendly moral values. This type of taxpayer will comply with the environmental tax laws by not complying they will be punished instead.

   Another reason why the taxpayer feels he is forced into complying with the law is simply because he is ignorant to the reasons the laws are introduced in the first place. Fikret et al (2011) earlier mentioned that the success of environmental taxes lies in the understanding of the public on the motives of the legislators who introduced the law.

3. Non compliance

   The final type of taxpayers is those who do not want to comply with the laws at all. They do not want to know why the laws are introduced and simply could not care less to the issue of environmental protection.
In the model the Interest Groups are seen to influence the behaviour of the taxpayer (layman or businesses). Interest groups are basically groups that represent special focuses in society i.e. a group of persons working on behalf of or strongly supporting a particular cause. The individuals involved in these groups maybe taxpayers themselves or not. These groups may influence the behaviour of the layman or businesses in terms of wanting or not wanting to comply with environmental tax laws. In the figure below as these groups have an influential role in the model, they are marked with dotted lines.

![Figure 1 Environmental taxation acceptance model](image1.png)

**Figure 1 Environmental taxation acceptance model**

![Figure 2 Environmental Taxation Acceptance Model Variables](image2.png)

**Figure 2 Environmental Taxation Acceptance Model Variables**
The model will now be broken down so that it can be tested using a suitable statistical method. Figure 2 summarises the variables indentified in the Environmental Taxation Model to be researched upon. It is proposed that the following variables will be independent variables that will affect the dependent variable (i.e. the acceptance of environmental taxes by Malaysian taxpayers):

**HUMAN BEHAVIOR ASPECTS**

**Future quality of life**

Qian and Chan (2010) proposed that the love of having a better quality of life in the future will encourage environmental protection. From their study we can imply that artificial inducements to encourage environmental protection such as environmental taxes are redundant. Vourc'h, A. (2001) is the opposite. He proposed that environmental taxes are needed to stimulate efforts to protect the environment.

H2 proposes “the Malaysian taxpayer finds that the result of environmental commitment is an improvement to the quality of life.” H2 will test whether this variable holds ground or not.

**Self actualization**

From the Clement and Chang (2010) experience concluded the protection of the environment will succeed, if the public puts the “value” of environment higher that immediate economic gains. Chen, Bao and Zhu (2006) found that residents of the city of Hangzhou are committed to paying for “green-space conservation” in the urban areas as they feel that they need to protect the aesthetic and the visual nature of Hangzhou.

Unless the public is willing to put the environment above immediate monetary gains then the introduction of any form environmental taxes may not be successful. (H2)

**Attitudes**

Graci (2008) found that incompatible corporate culture and the attitudes of employees were the most significant hindrance to the level of environmental commitment amongst all facilities in the tourism accommodation industry in Sanya, China. Good attitudes towards the environment will ensure there is support for any policies or attempts to protect the environment (this includes environmental taxes).
This variable is connected to H2. Unless the public has a positive attitude towards the protection of the environment, any attempts to introduce any environmental protection policies will fail including environmental taxation.

This variable is related to “forced compliance”. If a certain environmental policy is forced upon, there might not be commitment for the public to support the policy.

**Tax mitigation**

Gallo (2011) proposed that a punitive fuel surcharge policy will encourage motorists to use public transport or buy more fuel efficient vehicles. This implies that the taxpayer may accept a certain new environmental tax law to reduce their current tax position.

This variable may be in conflict with the self actualisation variable as the goodness in man will result in man automatically loving the environment. This variable will try to partly explain H3. If the public is happy with current laws, there will not be any need for the public to ask for new additions to the current laws.

Tax mitigation seems to be the in trend for vehicle related environmental taxes. There is a movement in Hong Kong, Italy, Ireland, US and even in Malaysia to use tax mitigation to encourage motorist to change their old environmentally unsafe vehicles to hybrids or to encourage the usage of public transport. This variable is related to H5 as the research plans to test whether practices from overseas do influence the acceptance of environmental tax laws in Malaysia.

**LEGAL ASPECTS**

**Immediate Tax incentives**

Mewton and Cacho (2011) found out it is the Australian Government that will have to take the first step to encourage the use of Green Power. The public will begin the use to Green Power if the government introduces a “carrot” in the form of tax incentives such as tax deductions to residential customers, exemption from the Goods and Services Tax and Green Power tax rebate or if the government buys the electricity and resells it to the public. This can be implied “any immediate tax incentives” is needed to encourage be environmentally conscience. We are proposing the carrot in
the form of tax incentives must be dangled before the taxpayer begins to accept environmental taxes. This variable is related to H1, H3 and H5.

Is the public ready to accept the full suite of environmental taxes or just only “the carrot” i.e. the immediate tax incentives? (H1) Is the public happy with the suite of taxes we have today or we need more carrots i.e tax incentives? (H3). Throughout our literature review, it is the practice of countries such as the US, UK, Hong Kong, China to dangle the various tax incentives to the public (at the same time more taxes). Is the public ready for the new practices from overseas or just the incentives? (H5)

**Forced compliance**

H4 proposed that the Malaysian taxpayer understands the motives behind environmental taxation laws. This could actually mean that he is not compelled to accept the laws because he understands why compliance is good for him.

Oliver et al (2011) found that the willingness of households to pay a premium for green electricity is influenced by the level of consumers’ understanding of issues concerning climate change. If the public did not understand why they need to protect the environment any attempts to introduce any environmental protection policies (including environmental taxes) will fall flat. Any compliance to the laws is because the public is forced into complying. Fu (2010) states that the public involvement in green policy development in imperative. Any forced down policy is not acceptable.

### 2.3 Research approach and process

This research is exploratory, descriptive, action-oriented and prescriptive in nature. It is exploratory as it explores how influences of foreign best practices, treaties and local needs influence environmental taxation laws in Malaysia. It is descriptive as it describes the development of environmental taxation laws in Malaysia and elsewhere before looking at the differences between the practices of the different countries. It is action-oriented, as it engages stakeholders through expert panel interviews and surveys to get their feedback and input about current environmental law practices. It is prescriptive as a set of recommended tax practices will be prescribed at the end for the use of public policy decision makers.
Graci (2008) mentioned that a multi-method approach comprises a combination of qualitative and quantitative research methods, such as questionnaires, interviews, stakeholder consultation groups and casual observation.

The multi-method approach will be used in this research as follows:

- **The qualitative approach** will include expert panel interviews to explore what taxpayers and interest groups want from environmental taxation laws. Although the gaps between Malaysian environmental taxation laws will be identified during Phase 3, the qualitative approach brings realism to the study as the gaps that really need to be addressed by selected Malaysian taxpayers can be identified. However, the qualitative approach due to the need to interact with the respondents may result in the study being focused on a small number of respondents and the results may not be expansive.

- **The quantitative approach** will be applied at the end of the research. Since the research deals with the acceptance of environmental taxes by Malaysian, the samples used should be more expansive. By using questionnaires and the quantitative approach, the research can be taken to a bigger sample of respondents. By sending the questionnaires via snail mail and the internet a bigger sample of respondents can be tapped. Results from the questionnaires can be tested its significance using statistical methods. By combining both the significance of approaches to research, the study can be more detailed as compared to when just one mode is being used.

This research will be divided into 6 phases.

**Phase 1: Literature Review**

In the first phase, the researcher looks in-depth various literatures dealing with environmental taxation and sustainability to look at how environmental taxation is practiced in various countries. Special attention is given to literature describing the process in the Commonwealth and the United States as our laws are based on the common law system. However, best practices from non-Commonwealth countries are also taken to account as good practices can be learned from them. To enrich the literature review, the researcher will also look at literature highlighting problem and issues concerning the introduction of the laws. Literature concerning sustainability in general will also be looked at to give a more rounded view of environmentalism. Literature comprises academic journals, dissertations, government reports, textbooks and media such as environmental films like *An Inconvenient Truth* and the 11th *Hour.*
Phase 2: Legislature Review

In this part of the study, the researcher will look through taxation laws in Malaysia such as the Income Tax 1965, the various custom laws and local government laws and match them with the good practice from similar laws from other countries (with a special bias to the Commonwealth and the United States due to similarities due to the Common Law system). Gaps between the current practices of Malaysian environmental taxation with the current practice in the Commonwealth are identified. The Commonwealth is used as a benchmark as Malaysia and many members of the Commonwealth due to history practice the Common Law system. The American system will also be looked at due to the amount of studies done on this matter and due to the American legal system still in spirit practice the Common Law system even their case laws are not binding or persuasive to the Malaysian Legal System. In this phase research focus 1, 2, 3 and research question 1 will be explored. However, since the study is in its infancy, research focus 1, 2, 3 and research question 1 might be modified later.

Phase 3: Preliminary Stage

Based on the literature review and the review of the legal gaps between the various countries and Malaysia, the researcher comes up with a preliminary model of what he wants to study.

Phase 4: Expert panel interviews

The study later moves into exploratory and action oriented research where a sample of taxpayers will be interviewed on their opinion on the current environmental taxation and gather from them their wish list on what needs to be removed or added to current tax laws. Important variables will be identified. Next the variables i.e. the wish list will be matched with the gaps identified during the literature review. Again since the research focus and question are maybe modified at this stage.

This phase of the study is inspired by the work Guglyuvatty (2010). Like Guglyuvatty’s study, a Delphi study will be conducted with a group of 30 experts. The experts from around Malaysia and a few foreign experts are selected to represent different viewpoints between the experts from various disciplines related to environmental taxation in Malaysia. Apart from the experts unlike Guglyuvatty’s study to give a wider worldview a few laymen (in the form on housewives, students and retirees) and community leaders (in the form of Members of Parliament) will be interviewed.
Experts are qualified through their knowledge, skill, experience, training and education; therefore, to select the experts for this research the following decisive factors were considered:

- knowledge of different environmental policies and surrounding debate;
- experience and contribution within the field of environmentalism in Malaysia
- for the community leaders, the knowledge of the local capabilities.

The group of experts composed of representatives from the following fields:
- Plantation industry
- Manufacturing
- Building
- Non Governmental Organisations
- Tax/Finance practitioners
- Transportation sector
- Public Sector
- Consumer group
- Community leaders
- Journalists
- International Experts

The individuals selected to participate in the inquiry were considered to satisfy the requirement to be an experts in the field of climate change volunteering to participate due to their interest in the topic and their own perceived ability to make a significant contribution. The researcher will prepare a set of closed ended and open ended question to present to the respondents. Like the earlier study, the respondents assess the criteria weights in measurable numerical term which is significant for the aims of this study, besides, it provides an extra data on change and variability of experts’ views. On the other hand, the open-ended question provides the respondents with opportunity to convey their views thus, facilitating in-depth analysis of the criteria.

In the closed ended questioning, the respondents are asked on evaluate selected tax policies which have connection to environmental protection which are sourced from existing Malaysian tax laws and some laws from other countries. In the open ended questioning, the participants are asked to voice out any issues that have not been sufficiently addressed in current tax laws concerning the environment.
Phase 5: Modified model

After the expert panel interview sessions have taken place, the researcher will transcribe the audio recordings or come up with expert interview minutes of the sessions within 2 days after the events ended. This is to make sure that the discussion issues in the expert panel interview sessions are fresh in the mind of the researcher.

To analyse the expert panel interview, transcripts of the expert panel interview will be analysed. Key points will be identified. Taking into account the feedback from the expert panel interviews, a modified model will be introduced based on the key points identified during the discussion analysis.

Expert panel interview transcripts are data which is qualitative in nature. Qualitative data requires the ability to question, translate, coordinate and determine the viability of the meaning of re-occurring issues and phenomena. Therefore the qualitative data will be analyzed for the emergence of key themes using a coding method. Coding is the process by which categories of responses are established for open-ended questions. Responses from respondents are reduced and sorted into specific response categories by reading the interview transcripts and grouping common themes and repetitive words.

After that the researcher will compare the themes that emerge from the coding with the original hypotheses, research focus and research question to see whether they still hold any truth. The hypotheses might be changed if needed. By now a finalised set of the research focus, the research question and the hypotheses will be finalised at this stage.

Phase 6: In-depth Questionnaires via the Internet and Snail mail

Next the modified model and their related hypotheses will be ready to be tested on a larger population. A set of questionnaires which incorporates related research questions will be produced and formularised. Questions asked at the respondents will be based on the Likert Scale as the questions will be about the level of acceptance of certain suggested amendments to the tax law and the level of acceptance of the law introduced in one Malaysian state or another. The format of a typical five-level Likert item is:

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

The respondents in this survey open to all Malaysians. A doclink will be posted on the webpages of major Malaysian newspapers such as the Star, New Straits Times and Kwong Wah to route the respondent to a webpage that will host the survey. Lucky respondents will receive lucky prizes which is an incentive for Malaysia’s to respond. The researcher predicts that the laymen will more likely answer the online survey.

The Likert scale which is a psychometric scale commonly involved in research that employs questionnaires will used in this in-depth questionnaire.

Copies of the survey will also be sent via snail mail to make sure those who are not internet savvy can participate in this survey.

**Phase 7: Data Analysis and Discussion of Research Findings**

From the data available from Phase 6, we can gauge the sentiments using descriptive statistics such as bar charts, pie charts etc. Quantitative data from the online and slow-mail questionnaires will be analyzed using the XLStat software. Frequency of responses from the questionnaire will be determined and data will be analyzed further using the cross-tabulation of variables. The researcher plans to use statistical analysis such as chi square analysis and multiple regressions.

**Phase 8: Conclusion**

In the last stage of this research, the research questions will be answered. The researcher will come up with a final set of proposed changes to the current Malaysian environmental taxation laws will by then take to account best international practices together with needs of the Malaysian taxpayer. This research hopefully can guide public policy decision maker to come up with more effective environmental taxation laws.
The phases of this study are summarised in the figure 3 below:

**Figure 3 Research methodology**
2.4 Respondent selection

There are two types of respondents in this research which include the taxpayer and the interest group. Taxpayers who members of the public who are directly affected with any changes in any tax laws including environmental tax laws. Two types of taxpayers with be explored i.e the business community and the layman.

The business community are people who either are self-employed either as a sole proprietor or a partner in partnership, or those who head companies. They will be interested in how taxation including environmental taxation laws encourage or discourage the way they do business. In the current Income Tax Act 1965 – which is the main law for direct taxation, they are probably filing the B (individuals with businesses) or P (partnership) forms or being a signatory in the C (Companies) files. They will probably be interested in issues such as how losses are dealt in laws, how incentives are awarded or how penalties are carried out. In environmental taxation laws the business community will be interested if they incurred any gains from a green project how this will be taxed or if any losses from a green project can be carried forward or sometimes backwards. They will be interested in green investment incentives to encourage their businesses to change to green forms of production. One example is the Green Building Allowance which was introduced in the year of assessment 2010 to encourage the building of green buildings.

In the form indirect taxation, the business community will be subjected to Custom Duties, Sales Tax, Service Taxes, Excise Duties and the new Goods and Service Tax (GST). Any increase, decrease or exemptions in any of the aforesaid indirect taxes will affect how many inputs they can buy or how much they can produce. Any elements of green taxation that affects the indirect tax rates will affect how much inputs or how much they will produce. At this juncture, the researcher wishes to point out that for the business community, any element green taxation from foreign countries which they buy inputs or sell to will affect their production decision. For the business community, green taxation laws locally and from their supply chain partner countries will affect them.

Local government tax laws among things cover land tax laws such as assessment and quick rent, disposal rules and traffic zoning laws. One example of Green Taxation in Malaysia is the introduction of plastic bag taxation in Penang and Selangor. Local government tax laws will affect the way businesses produce and deliver their goods and services in that vicinity.

Apart from the taxpayer group, interests groups will also be invited to participate in separate expert panel interview sessions include members of environmental non-
governmental organizations, politician or members of the government. Interest groups are basically groups that represent special focuses in society i.e. a group of persons working on behalf of or strongly supporting a particular cause. We will choose members from interest groups that have done work for environmental causes.

The expert panel interviews could be done face-to-face or via telephone or through video conferencing. The expert panel interviews sessions will be recorded, unless the respondents requests that no recording be made.

The laymen are blue and white collar workers in a business or anyone do not get themselves involved in business. These people include workers, retirees, housewives, full-time students, children and the unemployed. They maybe directly or indirectly affected by direct taxation (i.e. Income Tax) but may feel the effect of green taxation through indirect taxation or local government tax. For example, if there is tax on a restricted item, the people working in those industries might face redundancy with their jobs. The laymen are directly affected by indirect taxation and local government laws. The laymen are affected by local government laws as consumers of products and services in that vicinity.

The interest groups will be consulted twice in this research during the Expert panel interviews and the In-depth Questionnaires via the Internet and Snail mail.
References

Books and Reports

- Gore, Al (2006) *An Inconvenient Truth*, Rodale, USA
- The Malaysian Institute of Certified Public Accountants, Chartered Tax Institute Malaysia and Malaysian Institute of Accountants (2009), *2010 Budget Commentary and Tax Information*, Kuala Lumpur
- The Malaysian Institute of Certified Public Accountants, Chartered Tax Institute Malaysia and Malaysian Institute of Accountants (2010), *2011 Budget Commentary and Tax Information*, Kuala Lumpur
- The Malaysian Institute of Certified Public Accountants, Chartered Tax Institute Malaysia and Malaysian Institute of Accountants (2011), *2012 Budget Commentary and Tax Information*, Kuala Lumpur

Malaysian Laws

- Environmental Quality Act 1974
- Income Tax Act, 1967
- Renewable Energy Act, 2011
- Sustainable Energy Development Authority Act 2011

Government Reports and Policy Statements

- Department of Environment Food and Rural Affairs United Kingdom, *Incentives for household recycling*,
• Freebairn, John (2009), **Environmental Taxation and Its Possible Application in Australia**, The University of Melbourne, Melbourne, Australia for the Treasury, Commonwealth of Australia


• Ministry of Energy, Green Technology and Water, Malaysia (2009) **Dasar Teknologi Hijau Negara (National Green Technology Policy)**, Putrajaya, Malaysia


• Stern, Nicolas Herbert (2007), **Stern Review: The Economics of Climate Change**, Cambridge University Press, United Kingdom.

• Performance, Management and Delivery Unit (PEMANDU) (2010) **Economic Transformation Programme: A Roadmap For Malaysia**, Prime Minister’s Department, Putrajaya, Malaysia

• Pusat Tenaga Malaysia (Malaysian Energy Centre) (2009), **Incentives for Renewable Energy & Energy Efficiency in Malaysia**, Bangi, Malaysia


---

**Articles / Newspaper Reports**

• Harman, Alan (2009) **Malaysia Launches Scrappage Subsidy to Aid Struggling Auto Industry**, WardsAuto, Published on 16 March 2009, Penton Media Inc, United States

• Illegal palm oil from forests taints Unilever household brands, The Times, United Kingdom, Published on 11 December 2009

• Pasternack, Alex (2009), **As U.S. Cities Waver on Plastic Bag Tax, China's Bag Ban Saved 1.6 Million of Plastic Bags**, http://www.treehugger.com, United States, Accessed on 2 February 2010


• Leong Hung Yee (2010), **You can make electricity at home and sell it to TNB**, Published 11 November 2010, The Star, Kuala Lumpur.

• The campaign against palm oil: The other oil spill, The Economist, Accessed 10 December 2010

• Wong Wei-Shen (2011) **Maybank launches clean energy fund**, The Star, Accessed 11 December 2011
Journals

- Chen, Bo, Bao, Zhiyi, & Zhu, Zhujun (2006) Assessing the Willingness of the Public to Pay to Conserve Urban Green Space: The Hangzhou City, China Case. Published in the Journal Of Environmental Health, National Environmental Health Association, USA
- Forstater, Mathew. (2003): "Public employment and environmental sustainability." Published in Journal of Post Keynesian Economics 25, no. 3 385-407, USA
- Forstater, Mathew. (2006): "New Roles For Government Green Jobs Public Service Employment and Environmental Sustainability." Published in Challenge 49, no. 4 58-72, USA
- Hacatoglu, Kevork (2008), Bioenergy systems in Canada: towards energy security and climate change solutions." Published in Solar Energy, USA
- Konisky, David M (2006). Regulatory Competition and the Politics of Environmental Enforcement. Published in Political Science, USA
- Metcalf, Gilbert E. (1999) "A Distributional Analysis of Green Tax Reforms." Published in National Tax Journal LII, no. 4, USA
- Salnykov, Mykhaylo, and Zelenyuk., Valentin (2005) Estimation of environmental efficiencies of economies and shadow prices of pollutants in countries in transition. Published Education. No. 03-051, 2005, USA
- Thalmann, Philippe (2004). The public acceptance of green taxes: 2 million voters express their opinion. Published in Public Choice, USA
- Brose, Isabelle, Van Stappen, Florence and Castiaux, Annick (2010) Articulation of environmental and socio-economic externalities from bio energy,
Conference and Discussion Papers


- Konisky, David M (2006). *Regulatory Competition and the Politics of Environmental Enforcement*. Published in Political Science, USA

- Metcalf, Gilbert E. (1999) "*A Distributional Analysis of Green Tax Reforms.*" Published in National Tax Journal LII, no. 4, USA

- Salnykov, Mykhaylo, and Zelenyuk, Valentin (2005) *Estimation of environmental efficiencies of economies and shadow prices of pollutants in countries in transition*. Published Education. No. 03-051, 2005, USA

- Sofocleous, Stella and Wise, Victoria (2005), *Management preferences for accounting, taxation and regulation of forestry firms: a research note*, Victoria University, Australia

- Thalmann, Philippe (2004). *The public acceptance of green taxes: 2 million voters express their opinion*. Published in Public Choice, USA


Theses

- Au Yeung, Ching Cheong Stephen (2007). *Local Policies and the Environment – A Study on Vehicle Pollution*, University of Hong Kong, Hong Kong SAR, China

- Barbour, Karie Anne (2004). *Motor Vehicle Wealth Taxes And Fleet Age: Air Quality Implications*, University of Tennessee, USA

- Bellido-Arregui, Marita (2003), *Environmental Taxes and Global Warming*, University of Toronto, Canada

- Chan, Wai Ming (2008). *An Evaluation of Hong Kong’s Green Incentive Scheme for Residential Building Development*, University of Hong Kong, Hong Kong SAR, China
• Graci, Sonya Rita (2008). "Environmental Commitment in the Tourism Accommodation Industry In Sanya, China, University of Waterloo, Ontario, Canada
• Lee, Joon-Hee, "Fossil Fuel Taxation For Climate Sustainability: Perspectives Of Mainstream and Ecological Economics Applied To The Case of South Korea, University of Delaware, USA
• Lewis, Robin A. (2006) The Politics Of Sustainability: A Case Study Of Forestry Policies In Peninsular Malaysia, Miami University, Ohio, USA
• Mariola, Matthew J., (2009) "Are Markets the Solution to Water Pollution? A Sociological Investigation of Water Quality Trading, The Ohio State University, USA
• Mazumder, Diya Basu, (2007) Essays In Vehicle Emission Policies, The University of Texas at Austin, USA.
• Wang, Qian (2004), Assessment of the Emission Trading Policy: A case study for the Acid Rain Program in the United States, University of Waterloo, Ontario, Canada
• Weaver, Alicia A (2007), The Impact of Public Opinion on Environmental Policy: A Cross-national Investigation, The Ohio State University, USA
• Zhou, Qingshui (1999). Trade and the Environment: A Political Model of International Public Goods Problem, West Virginia University, USA

Film

• An Inconvenient Truth (2006), Paramount Classics, USA
• Earth (2009) Disney Nature, Paris, France
• The 11th Hour (2007) Warner Independent Films, USA