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**Landfill Extension Developments in Hong Kong:
A Study of Agenda Setting and Policy Dynamics**

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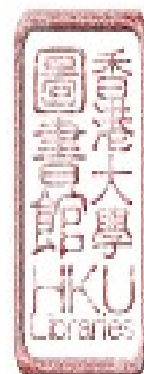
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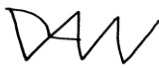
August 2014




DECLARATION

I declare that this Capstone Project Report, entitled Landfill Extension Developments in Hong Kong: A study of agenda setting and policy dynamics, represents our own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or any other institution for a degree, diploma or other qualification.


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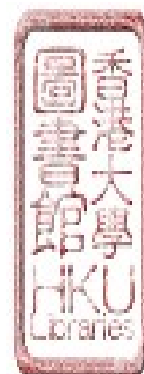
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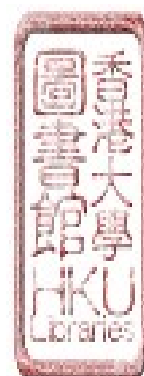
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ABSTRACT

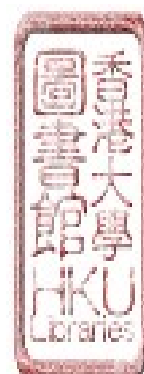
This project aims at studying the setting of government agenda of landfill extensions in 2013 and 2014 by Kingdon's three streams agenda setting theory to explain the open and/or close of the policy windows. Every theory has its limitation. The project will use Mays' political feasibility and Elmore's policy tools analysis to supplement agenda setting theory so as to further look into the microscopic Hong Kong's political habitat. Finally, experience from Macau and Singapore on municipal solid waste management will be shared to enlighten Hong Kong to sustainable management of municipal solid waste.



ACKNOWLEDGEMENTS

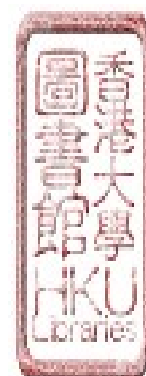
We would like to express our whole-hearted gratitude to our supervisor, Professor Ian Thynne, for his continuous guidance and patience throughout our capstone project over the past year.

We would also take this opportunity to thank all our family members, friends, colleagues and classmates for all your tangible and/or intangible support and encouragement throughout the past two years of the MPA programme.



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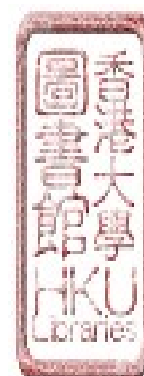
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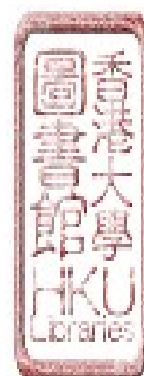


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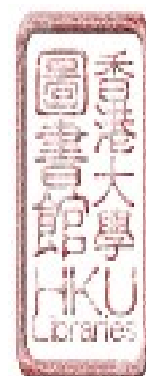
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LIST OF ABBREVIATIONS

CE	Chief Executive
DAB	Democratic Alliance for the Betterment and Progress of Hong Kong
EAP	Panel on Environmental Affairs
EIA	Environmental Impact Assessment
EPD	Environmental Protection Department
EnB	Environment Bureau
FC	Finance Committee
IWMF	Integrated Waste Management Facilities
JR	Judicial Review
LegCo	Legislative Council
MSW	Municipal Solid Waste
NENT	North East New Territories
PWSC	Public Works Sub-committee
SENT	South East New Territories
SKDC	Sai Kung District Council
TKO	Tseung Kwan O
WEEE	Waste Electrical and Electronic Equipment
WENT	West New Territories



CHAPTER ONE: INTRODUCTION

Focus, Objectives and Background of the project

This project focuses on the landfill extension developments in Hong Kong. It adopts Kingdon's (1995) agenda setting theory as the basis of the analytical framework. In considering the unique political environment in Hong Kong and its impact on landfill extension proposals, May's (2005) political feasibility analysis is used to complement Kingdon's political stream discussion, along with a discussion of policy tools drawing on Elmore's (1987) analysis. Of particular interest is the contradiction between local concerns and overall benefits to Hong Kong, along with arguments about the post-1997 disarticulation of the political system weakening the HKSAR Government's policy capacity to put forward landfill extension proposals.

The project recognizes that over the past two decades landfill being a core solution for municipal solid waste problem ("MSW") in Hong Kong. The existing three strategic landfills, namely the South East New Territories ("SENT") landfill, the North East New Territories ("NENT") landfill and the West New Territories ("WENT") landfill, will respectively reach full capacity in 2015, 2017 and 2019.

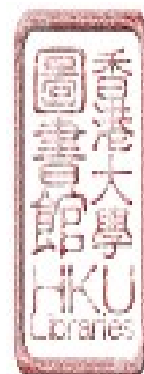
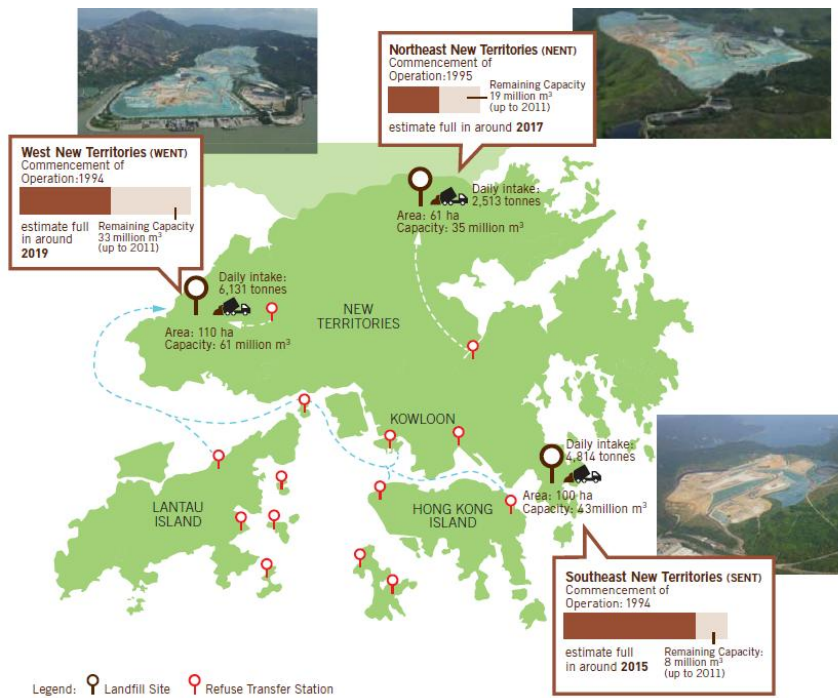


Figure 1: Location and utilization of landfills in Hong Kong



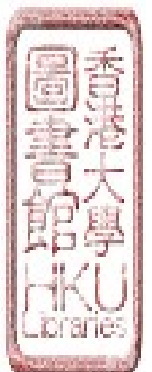
Source: (EnB, 2013, p.6)

The HKSAR Government, in consideration of the pressing demand of extra landfill space, filed funding request in respect of the proposed landfill extension in the Legislative Council (“LegCo”) in June 2013; however it suffered from setback. Thereafter the HKSAR Government continues putting efforts to push the proposal onto the policy agenda but it has not yet obtained LegCo’s approval before the summer of 2014.

Research Questions & Related Propositions:

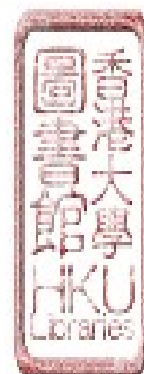
Theory & Practice

This project addresses the following research questions:



1. How do problems and issues get onto the public policy agenda and receive some form of attention?
2. When, and why, did the need for landfill extension in the management of solid waste in Hong Kong appear on the public policy agenda and receive policy attention?
3. What alternatives to landfill has the HKSAR Government addressed and adopted to deal with the management of solid waste?
4. What policies and strategies can the HKSAR Government adopt in future to deal with the management of solid waste?

There are many potential agenda items worth the serious consideration of people in and around the HKSAR Government. Compared with other policy tools, landfill, as the last resort, is necessary in waste management chain. Due to insufficient capacity of the three existing landfills, the HKSAR Government has decided to expand the three landfills. However, the society does not accept the proposal and criticize that the HKSAR Government has not done enough in the areas of landfill operation, waste reduction and recycling. In consideration of the widespread discontent over landfill extension proposal, this project attempts to

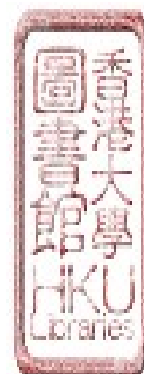


examine the suitable time and proper means to push the proposal forward and meanwhile consider if other alternatives should be adopted to complement landfills.

Overview Of the Analytical Framework

This project addresses the policy making process of how landfill extension has become the recognized solution on the solid waste management agenda in Hong Kong and its development in the legislative stage of the policy process. To study the agenda setting process, Kingdon (1995) offers a dynamic and comprehensive approach in the three streams model. This model not only considers the problem definition process in the society, the policy solutions available, and the fluid political environment; it also illustrates how the problem stream, policy stream and political stream interact with each other in the agenda setting process. This model covers most important factors in the policy process in agenda setting stage and, therefore, is chosen as the main part of the analytical framework in the study.

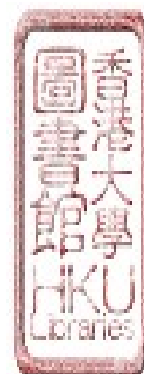
While Kingdon's model can be adopted to analyze most empirical phenomenon related to agenda setting of solid waste management in Hong Kong, special attention needs to be paid to the development of landfill extension as a policy proposal in the legislative stage. In the regard, May's (2005) political feasibility



analysis which calculates the support and objection of policy proposals can be used to exam the political landscape in Hong Kong and explain why the proposal is passed or not in the LegCo. The research also examines whether the policy makers in Hong Kong have adopted the legislative strategies addressed by May.

This project mainly concerns landfill extension as a policy proposal that rises to the top of policy agenda and its development in legislative stage. To broaden the horizon of analysis, it is also relevant to assess the nature of policy alternatives and see why particular policy proposals have been chosen by the policy makers during the policy process. In this connection, the policy tool model by Elmore (1987) is valuable in categorizing various policy options on solid waste management comprising types of mandates, inducements, capacity building and system change.

Kingdon's three streams model, May's political feasibility analysis and Elmore's policy tool theory constitute the analytical framework of this project. In application of these models and theories, adaption is needed as the political circumstances in Hong Kong are different from those in America where the models and theories originated.

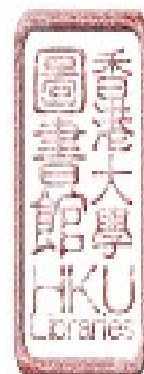


Research Methodology

This project utilizes a spectrum of research methods. Included are reviews of scholarly literature on and related to the models and theories of Kingdon, May and Elmore, plus literature generally related to policy dynamics and some specifically about waste management and landfill extension, and in addition to HKSAR Government reports, LegCo papers, newspapers articles and relevant online journals.

Desktop research is adopted as the main research method as the necessary empirical data about the development of solid waste management, including those of landfill extension, are readily available in official papers and media reports. The standing of different players involved could also be discovered through these sources. In selecting the sources of data, the research adopted a cautious attitude that official papers are preferable than unofficial documents, and media with good reputations is preferable than reports without proof of sources. This approach could best reflect the recognized discourse within the public and give a fair account of different players involved in the policy process.

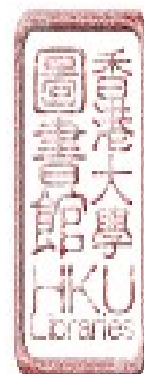
For example, in describing the solid waste development in Hong Kong and mentioning the standing of the HKSAR Government, this research relies on the



information provided in the official homepage of the Environmental Protection Development. (“EPD”) in describing legislative issues about landfill extension, the main sources are official papers from the LegCo. In terms of media reports on the issue and the standing of players, the South China Morning Post, a recognized English newspaper in Hong Kong, is often drawn on. Such desktop research with cautious selection of data was an efficient and effective way to collect empirical data for the analysis of the issue being addressed.

Chapter Outline

Following this introductory Chapter, Chapter Two establishes the analytical framework of the project and indicates how the analytical framework can be applied in the specific situation in Hong Kong. In Chapter Three, a historical account is given of the development of landfill extension in Hong Kong, along with an account of policy alternatives on solid waste management. In Chapters Four and Five, an array of data is examined in detail as the main findings of this research. Chapter Six concludes the project with key lessons learnt. It comprises brief reference to possible lessons from neighboring contexts, Macau and Singapore, as well as referring to the limitations of the analytical framework in the light of the Hong Kong experience.

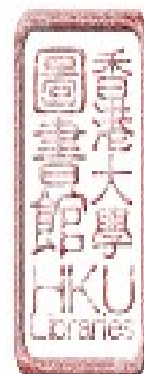


CHAPTER TWO: ANALYTICAL FRAMEWORK

Introduction

Policy making is a complicated process that involves different actors interacting with each other on various issues in a circumstance that is affected by numerous factors. To conceptualize how a policy issue and its solution eventually catch public attention among many issues and being seriously considered by the decision makers, Kingdon's (1995) three streams model, which illustrates how problem stream, policy stream and political stream come together would open a policy window, offers a comprehensive and dynamic framework to address this process of agenda setting.

Yet getting to the top of agenda is not the end of the story, a policy proposal needs to go through a process of enactment by the decision maker in order to be executed by the administration and make concrete effect to the citizens. To increase the chance to success in the legislation, policy makers have to calculate the support and deny of a proposal and adopt strategies to guarantee approval and minimize resistance. In this regard, May's (2005) political feasibility model is a device that help policy makers to figure out the map towards enactment of a policy.

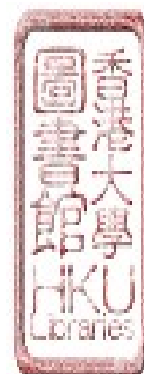


Through the process of policy making, actors would frame and reframe problem and solutions to its favour to catch attention and gain support. Such an exercise of packaging is bounded by the specific features of a policy proposal. Elmore's (1987) policy tool paradigm explores the nature of a policy proposal and explains the choice of policy tools.

Agenda Setting and Policy Window

Kingdon's (1995) three-stream model helps analysis how policy issues gain salience on governmental and decision agendas. The core characteristic of Kingdon's model is the coupling of the streams of problems, policies and politics, in other words open of policy window, in a policy system. The problems stream relates to the perception of a problem framed by policy participants. The policy stream is a spontaneous selection process that determines the survival chance of ideas in "policy primeval soup". The political stream composes of public mood, election results, pressure group campaigns, partisan or ideological distributions in legislature, and alternations of administration. These developments remarkably influence the salience of the policy issues on the agendas. (Kingdon, 1995; Cairney, 2012)

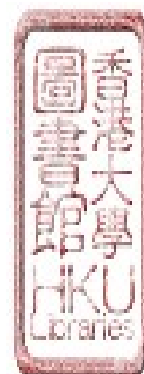
In the problem stream, when perceiving a condition as a problem, people must be



persuaded that some action had to be done to improve the situation. A problem become aware due to indicators, feedback about current programs or focusing events fostering pre-existing problem that are “in the back of people’s minds”. Additionally, budgets can promote an item up to the policy agenda or restrain an item from gaining a higher position on the agenda (Kingdon, 1995). In fact, a problem can be artificially defined in order to affect people’s attention towards the problem, similar as what Rochefort and Cobb’s (1994) theories advocates.

The policy stream relates to the process in which proposals are prepared, redrafted and accepted in the policy system. Policy entrepreneurs have to put effort on softening up the public and policy communities. The feasibility of a proposal relies on its technical viability, costs, supports from the public and politicians, as well as the indigenous value choices in the community (Kingdon, 1995; Cairney, 2012). The chance that a solution will be placed on policy agenda grows if alternatives are available. As a result, the policy stream creates a short list of solutions which is an agreement that some particular proposals are prominent (Kingdon, 1995).

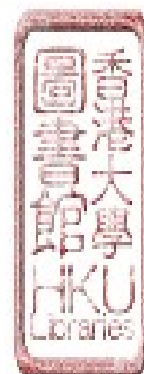
In the political stream, Kingdon (1995) pointed out that consensus building is influenced by bargaining. Both elected politicians and non-elected



Governmental officials would assess the public mood normally perceived from certain active sectors of the public. Apart from the public mood, government officials would also consider the extent of consensus among organized political force. Further, any turnover or change of administration would also affect the prominence of an issue on the policy agenda. In this respect, participants would take part in the bargaining process to protect their interests or gain some benefits.

Kingdon (1995) mentioned about an open policy window denotes an opportunity for policy actors to push their proposals by means of framing condition as problem to draw the public's attention. Policy window is open when the policy stream couples with the streams of problems and/or politics. When a problem is recognized, a solution is available or developed, and the solutions are political receptive, policy change is likely to occur.

In Kingdon's (1995) three-stream model, problems stream, policy stream and political stream are to large extent explicit conditions that affected by various uncontrollable factors. Policy entrepreneurs have to wait for the time when these explicit conditions are favorable to take action; a time that the policy entrepreneur could influence the flow of streams by his effort and to push forward the policy to the top of agenda when policy window opens. To better grasp the opportunity,

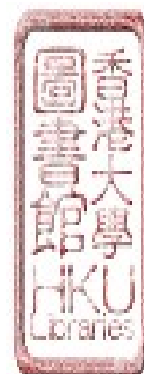


policy entrepreneur should have a picture on the development of different streams. Especially when policy entrepreneur have to interact with other political actors, he has to know the potential support and resistance on his proposal. In such situation, May's (2005) political feasibility analysis provides an action framework to gain support and reduce resistance.

Policy Map and Strategy to Succeed

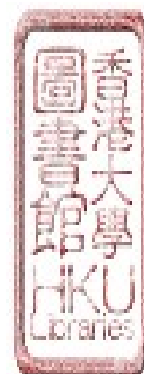
Kingdon's theory of policy window discussed factors of each three streams and how their interaction would lead to open or not open of policy window. It describes how policy entrepreneurs grasp opportunity to push forward government agenda setting. When a policy proposal is at the top of government agenda and catch the attention of policy makers and the public, it still needs to go through the enactment stage to become a law in action and executed by the administration. May (1986, 2005)'s political feasibility analysis is more applicable in the legislation stage and give advice to policy makers to formulate strategy to win support from legislators.

May (1986) points out that one major setback of political science is that much policy analysis were retained at theoretical level and could not provide practical policy guidance in reality. Political Science developed as a specific discipline of



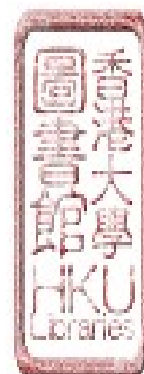
social science because it put specific effort on the political aspect of policy analysis, whereas prior social science streams would attend to evaluate the economic viability of a policy. Political Science is interested to study politics and political behavior in policy formation and implementation. However, it is hindered by the dilemma that human actions are not fully predictable, so theories formulated in policy analysis could give limited feasible relevance to decision makers in the actual world.

Nevertheless, May suggests several strategies are applicable to enhance political feasibility of policy making. It is to assess the probability of success of a policy proposal by assessing the possible support and resistance of legislators and interest groups. It calculates the “political prices” of legislators to enact or not enact a policy proposal and the effect to their political capital. Such considerations should be made in the early stage of policy formation to enhance the change to be passed by legislators and implemented by the administration. Timing is also an important concern as specific circumstance in a limited duration would be particularly favorable to the pass of a policy proposal. With regard to the constraints of unpredictability in policy analysis, May (2005, p.128) conceptualized these strategies into a political feasibility framework which would help policy makers to form a policy map. Policy map is a “depiction of the lines



of political support and opposition for the policy terrain.” It lists out various policy possibilities and mark the preference of various interest groups on these policy varieties. The information of policy preference of different parties could be acquired from the four major sources: position of key legislators; political coalitions of legislative members; public opinion from polls; position of key interest groups. Such an exercise could help to assess the support and resistance of each policy variety and find out which policy proposal faces more approval and less disapproval and could help decision maker to formulate strategy to shift the balance to its favor.

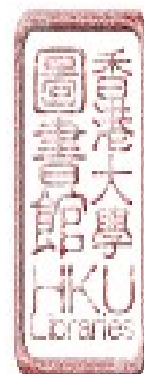
Building coalition with dominant supporters of the proposal and minimize resistance via means of exemption clauses are the main principles to enhance political feasibility. Also, policy makers have to control the visibility of the policy development to balance the desire of public involvement via save enough flexibility in formulating the proposals. May (2005) suggests several legislative strategies to improve political prospects, including co-sponsorship of legislators, establishing the contours of debate around a given policy issue, and manipulating policy enactment process. Rhetoric on debates also refers to reframe the problem and solutions to the advantage of the proposals.



Choice of Policy Tool

The three-stream model and the policy map analysis both mentioned the packaging of problems and policy solutions. Kingdon uses the concept of coupling to describe the process that policy proposals are ready around and advocates waiting a problem to emerge and reframe the proposals as a solution to the problem. May focuses more on the debate around policy solutions between the support and resistance and how each side reframes the problem and solutions to its favor. Both these models may imply that policy proposals are could be shaped in endless form and effect and makes the proposals are indifference in nature and function. However, such repackage should have a boundary which is framed by the distinctive features of the policy proposal. Policy makers should consider the distinctive features of policy proposals and choose the solutions that fit the situations and make effort to package the solutions to gain support. The policy tool model provides insights on this regard by categorize policy solutions into four types according to the nature and function of the tools.

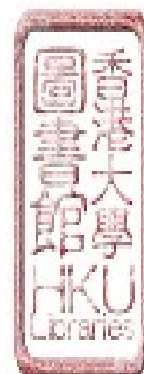
Policy tool is an authoritative choice of means to accomplish a purpose and a mechanism or arrangement that defines how public programs work. According to Elmore (1987), public policies are packages of policy tools. Each tool has its



own distinctive features, skill requirement, imperatives, advantages and disadvantages. The tools approach can dimensionalize policy programmes, study and identify the features of policy tools as the building blocks of policy programmes. Policy tools can be classified into four different types: mandates, inducements, capacity-building, and system changing. Since each tool has its own strengths and weaknesses, policy makers can apply different tools for different purposes or under different situations.

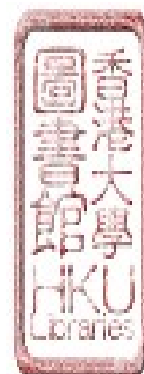
Mandates are the authoritative rules or prescriptions governing the behavior of individuals and agencies, and are intended to produce compliance (McDonnell & Elmore, 1991). It assumes that “the actions required is something all individuals or agencies should do, regardless of their differing capacities, and that the action would not occur, or would occur with less than the desired frequency, in the absence of explicit prescription.”

In Elmore’s (1987), inducements are “conditional transfer of money in return for the productions certain goods and services”. It is assumed that “in the absence of additional resources, once would not expect certain valued outcomes to be produced, or to be produced with the desired frequency of consistency required by policy, and that money is an effective way to elicit performance.”



Capacity building is the investment of various kinds for strengthening endowments. According to Elmore (1987), it is “the transfer of money to individuals or agencies for the purpose of investment in future benefits – material, intellectual, and human resources. Capacity building carries the expectation of future returns, and as with all investment decisions, these returns are often uncertain, intangible, and immeasurable”. Compared with mandates and inducements, capacity-building is the most lenient policy tool. It focuses on producing a more long-term and diffuse benefit, rather than short-term effect brought by compliance or financial incentives. To make this policy tool more effective, it is important to link the information or messages delivered in the programmes with individuals’ benefits.

Institutional change of relationship is among policy actors. To deal with politics in policy analysis, interest groups alignments are mapped to identify political support and opposition for the policy tools. The key interest groups, stakeholders, their corresponding motivation and beliefs as well as the resources would also be identified. Secondly, the effectiveness of the strategies that the Government adopted in dealing with the politics would be studied and evaluated in terms of coalition-building, reducing resistance, mobilization of appropriate actors, matching policy environments with appropriate policy design and choose

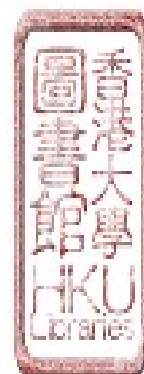


of appropriate arenas, as appropriate (May, 2005, p.142-146).

Application of the Analytical Framework

The analytical framework of this project is composed of Kingdon's three streams model as the backbone, supplemented by May's political feasibility analysis and Elmore's policy tool model. Each of these theories is formed based on policy development a specific time and place. Adaption of the models is needed in order to apply them in the analysis of the landfill extension in waste management in Hong Kong where the political system and circumstance is different.

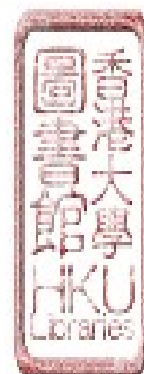
In Kingdon's three streams model, policy entrepreneurs have a prominent role to grasp the opportunity of open window and push forward policy proposals to the top of agenda. In this horizon, policy entrepreneurs are policy advocates get standby around the Government system and make chance to promote its proposals, while decision makers are at the top of the power structure and make decisions when proposals reach their eyesight. In the project, policy entrepreneurs refer to political players who have prominent influence to the agenda setting process, both inside and outside the Government system as in Hong Kong the political stage is small in scale and there is no explicit distinction between politicians and policy advocacies and policy initiators could be recruited by the Government as



government officials.

May (2005) demonstrated how to make a policy map by figure out possible policy varieties and the potential policy provisions of each varieties and mark the positions of the interest groups on each of the policy provisions. Such an exercise designed based on the healthcare policy at the specific political system of America. As the political system of Hong Kong is not identical, this project adopts the concept of policy mapping and figure a map of support and resistance based on the political circumstance in Hong Kong.

In applying Elmore's policy tool model, in addition to making a categorization of policy alternatives of solid waste management in Hong Kong, the project focuses on explaining why a particular type of policy tool is more suitable in the concerned period and circumstances.



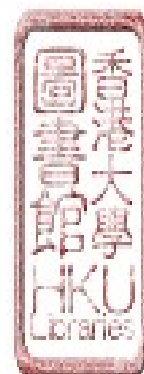
CHAPTER THREE: HISTORICAL DEVELOPMENT OF LANDFILL EXTENSION IN HONG KONG

Introduction

This Chapter focuses on the development of landfill extension and other policy alternatives on solid waste management in the past 25 years. A table summarizing a chronology of milestones is presented in the [Appendix I](#).

Development of Practices for Handling the MSW in Hong Kong

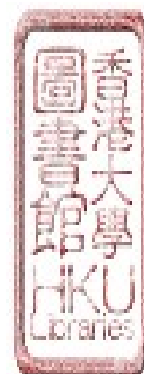
This project recognizes that over the past two decades, landfill being a core solution for MSW in Hong Kong. In view of the process, EPD plays a prominent role for handling the problems of MSW.. EPD has been set up in 1986 , it is an executive department under its own Bureau and now is called Environment Bureau (“EnB”) for enforcing the laws and implementing the policies relevant to the environment issues. In June 1989, the HKSAR Government published a White Paper “ Pollution in Hong Kong – A time to Act” (EPD, 2005). According to the White paper, a serious decision has been made by the Government for closing down the incinerators system in considering the side effects of environmental pollution to the living environment and the health of the public. The HKSAR Government gradually closed down the four incinerator



plants at Lai Chi Kok , Kenndy Town , Kwai Chung and Mui Wo since 1991 to 1997 respectively. Furthermore, the closing down of the thirteen old landfills were also the main reasons for the needs of building up the spacious landfills afterwards.

This White Paper seems like an early blueprint for the preparation of environmental strategies and policies alternatives for the next century in Hong Kong. It stated that environmental strategies should be reviewed and conducted every two years afterwards. The fourth reviews were then published in 1991, 1993, 1996 and 1998 respectively. The findings and the recommendations which were collected from the fourth reviews were also the framework of the policies related to the environment issues in Hong Kong. According to the findings, how to tackle the problems of waste management and how to prepare the waste reduction plan were the utmost urgency for EPD due to the public concern. (EPD , 2005)

After reviewing the White Paper, EPD conducted a “ Waste Disposal Plan for Hong Kong”. The three strategic landfills (i.e. WENT at Nim Wan; SENT at Tseung Kwan O (“TKO”); NENT at Ta Kwu Ling) were commenced in 1993, 1994, 1995 respectively as the retiring incinerators and thirteen landfills were all

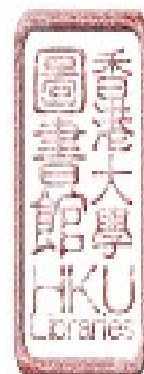


subsequently phased out by May 1997. After then, the solution for solving the MSW was mainly depended on the three landfills . By the time the three strategic landfills were implemented, the MSW has been exceeded the expected amount. EPD stated that landfills would be full in a short period of time as they have been designed for (EPD, 2014).

In 2000, EPD commissioned another study on “Extension of Existing Landfills and Identification of Potential New Waste Disposal Sites “and the study was completed in early 2003. It recommended a long term strategic plan for the development of landfill extensions development. It also indicated some new locations for the disposal of MSW in the coming next fifty years. The HKSAR Government believes that it would be a cost effective way to operate the landfills continually.

Tackling the Waste Crisis

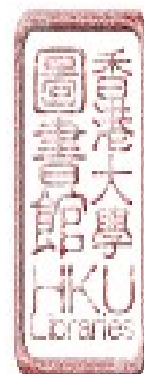
In view of the seriousness and urgency of the landfill extension in Hong Kong, a working group has been set up by the HKSAR Government to study more solutions. In respond to the concerns of the public during the community engagement progress, EPD established a “First Sustainable Development Strategy for Hong Kong” in 2005 (Sustainable Development Unit, 2004), this is a policy



framework to set out the strategy and target for MSW management in Hong Kong from 2005 to 2014. Subsequently, the HKSAR Government had issued two policy plans for management of MSW, i.e. “A Policy Framework for the Management of MSW (2005-2014)” (EPD, 2005) and “Hong Kong Blueprint for Sustainable Use of Resources (2013-2022)” (EnB, 2013). According to the policy papers, the three strategic landfills were overloading and they will be out of space in 2015, 2017 and 2019 thereafter if waste levels continue to increase. With reference to the Hong Kong’s practice of waste collection and the transferring services in the past 20 years, it is time to encourage the public to change their habit.

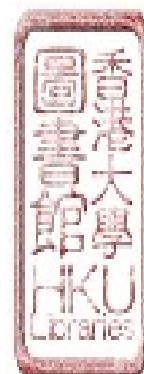
Other Tools as Policy Alternatives

Ms Sarah Liao, former Secretary for the Environment, Transport and Works was appointed in 2002 until 2007 for assisting Mr Tung Chee Hwa, the former Chief Executive (“CE”) to tackle the problems of MSW. She recognized the best way would be extending the strategic landfills together with other alternatives. However, the appointment of her successor Mr Edward Yau, former Secretary for the Environment did not grasped the opportunities for educating the public on this issue. In 2007 to 2011, Edward Yau was putting much effort for strengthening



district recycling facilities and networks in order to promoting mandatory implementation of Building Energy Codes and other policies tools so as to encourage the public for reducing solid wastes. In 2009, the environmental levy scheme on plastic shopping bags has been launched, it was the introduction of the legislation on product-specific measures for electrical and electronic equipment and vehicle as well as conducting a public consultation on MSW Charging. The HKSAR Government also supported the development of the recycling industries in Hong Kong (EPD, 2005).

Facing with the imminent waste management problems, Edward Yau finally recalled the urgency of the issues; the three strategic landfills were expected to be full of capacity one by one very soon (LC Paper, 2014). In 2011, the HKSAR Government announced an action agenda of how to tackling the MSW in Hong Kong along with the experiences of other major cities. It was also the basis of the environmental policy framework in Hong Kong. Under the main theme of “Reduce, Recycle and Proper Waste Management”, the HKSAR Government was looking into more ways for reducing the MSW and the strategy of waste recovery through economic means. (LC Paper, 2014). Apart from setting out a series of initiatives relating to waste reduction at source, the action agenda was also mentioned the new technology of waste treatment facilities for handling the food

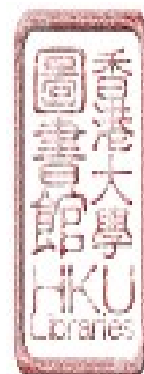


waste as well as the needs for landfills extension. The HKSAR Government was well aware of the strong views opposing of the extension plan to the residential area in TKO. Therefore, the proposal has been revised and ready for re-submission to LegCo accordingly. Following the new Government under CY Leung's era, CY appointed KS Wong to replace Edward Yau to be the Secretary for the Environment on 1 July 2012. Furthermore, Ms Loh Kung-wai, Christine was appointed by CY Leung to pick up the position of Undersecretary for the Environment. Mainly for assisting KS Wong to handle the waste crisis and the urgency for expanding the limited landfills.

In May 2013, the EnB issued the "Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022" ("the Action Blueprint"), which maps out a comprehensive strategy which including the future targets, environmental policies and the action plans for MSW in the next ten years (EPD, 2005). As advised by the HKSAR Government, the SENT, WENT, NENT landfills will be exhausted one by one and there will be no means to tackle such problem in a short period of time if the HKSAR Government does not acts on time.

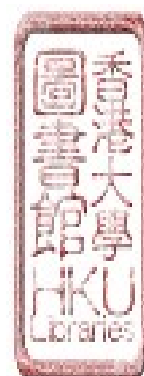
Uprising Discontent with the Government

Continue with the political instability in Hong Kong, the public has high



expectation on every policy of the HKSAR Government. It had been an uphill battle for EnB and EPD and it became more challenging than ever when implementing any policies. The HKSAR Government Officials KS Wong and Christine Loh were criticized by politicians, media, green groups, local stakeholders as well as the local residents on the issue of landfills extension. Following the hunger strike of TKO residents, the proposal of SENT landfill extension was withdrawn on 27 June 2013. The withdrawal even triggered Tuen Mun and Ta Kwu Ling local residents' vigorous protest campaign and finally influenced the legislators, even pro-democrats camp, veto down the proposals of WENT and NENT landfill extensions thereafter.

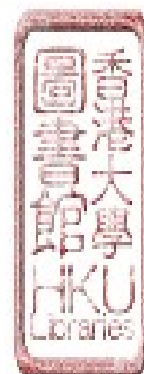
By end of 2013, a consultation paper on political reform has been adopted for consulting the public on the ways for selecting the CE by universal suffrage in 2017 and forming the LegCo in 2016. Within the consultation period, there were uprising discontent of the public with the HKSAR Government. Although the PWSC ultimately approved for recommending the Finance Committee ("FC") of LegCo to approve the funding of 1.9 billion dollars of extension of the TKO landfill in 2014, the applications for funding for the construction of incinerators has no time to vote. A "filibuster" phenomenon during the FC meeting in July 2014 led to the suspension for discussing the budget proposal of three strategic



landfill extension. After the fourth meeting of FC, the following agendas such as approval seeking for the recommendation of the PWSC regarding the extension of SENT landfill made on 21 May 2014; re-submit the funding proposal for the extension of NENT and WENT still putting on the waiting list for discussion. The related agendas might be continued to discuss in October 2014 after the summer recess of LegCo. (LegCo, 2014)

Concluding Comments

With reference to the historical development for handling the MSW in Hong Kong, there are many factors affecting the agenda setting and it should be taking account for the policy-making process in different period. Some LegCo Councilors and the members of local concern groups took part in the demonstration of 1 July, some of them were arrested by Police after joining the rehearsal of “Occupy Central”. Following a couple weeks demonstrations, LegCo became a target place for the possible violent petitions. There are still many uncertainties for putting forward the agenda together with the alternatives of other policy tools. The development of the landfills and the factors of this policy failure are discussed in the following Chapters.



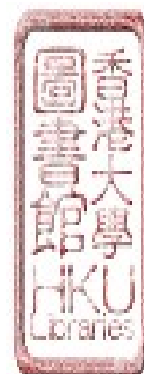
CHAPTER FOUR: AGENDA SETTING OF THE LANDFILL EXTENSION POLICY

Introduction

In this Chapter, landfill extension from the perspective of agenda setting is discussed. Kingdon's (1995) three-stream model is suitable to account for the policy-making process after the handover because it reveals the politics of policy-making which always lead to unpredictable outcome, sometimes fortuitous and sometimes disastrous. The policy window will only open if the streams of problems, policy and politics are coupled together (Scott 2010). Below, each stream in the context of landfill extension is analyzed, followed by a discussion of policy windows in 2013 and 2014.

The Problem Stream

There are numerous problems and issues in the society but only limited number is able to gain salience on the policy agenda. This relates to how policymakers present issues and define those issues as problems so that they can sell their own proposals to the public. Indicators, feedback, focusing events and budgets that draw people's attention towards an issue affect the proposal of landfill extension in different weight. Problem definition is actually about the translation of

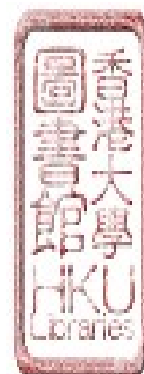


undesirable conditions to problematic situations so that policy actors are able to push their proposals onto the agenda (Kingdon, 1995).

Indicators

Since colonial period, the Government has adopted rational approach in policy-making process. Indicators are proper tools to explain undesirable situations because of the apparent objectiveness. People both within and outside the Government use indicators to regularly monitor activities and conduct ad-hoc studies on some particular issues (Kingdon, 1995). Every year EPD conducts quantitative analysis on waste disposal in order to monitor MSW in Hong Kong (EPD, 2014). On the other hand, Sai Kung District Council (“SKDC”) commissioned EDMS Consulting Limited to conduct an Odor Study in TKO area to locate malodorous sources and seek corresponding solutions to improve the situation (District Council, 2013). Both the HKSAR Government and SKDC utilized quantitative research methods to assess the degree of severity of problems and the changes in those problems.

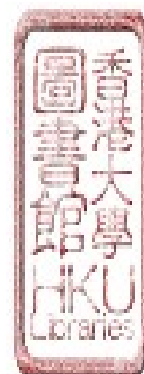
In political world, construction and interpretation of indicators are equally important for policy actors to drive issues to prominent positions on the agenda (Kingdon, 1995). The Government always constructs indicators and translates



particular conditions to policy problems. In respect of landfill extension, the HKSAR Government has attempted to highlight lack of landfill space and steady increase in the volume of MSW but never mentioned its analysis on MSW categorized by types of waste when it promotes its proposal to the society. In short, EPD has selectively and tactfully quoted its figures to draw people's attention to the compelling need of landfill extension. William Lau pointed out that large proportion of MSW in Hong Kong was construction waste and opined EPD should properly deal with the substantial amount of construction waste dumped at landfills (Lau, 2013).

Feedback

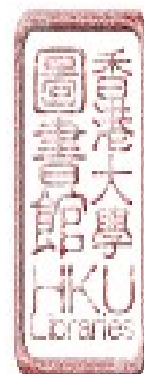
Nowadays people are more ready and willing to speak out their dissatisfaction. During the colonial era, all the things were easily under control and the HKSAR Government was able to formulate policy rationally. Policymakers used indicators to persuade stakeholders and the public to accept their proposals. This situation has gradually changed after the handover. In the case of landfill extension, citizens were not convinced even though the HKSAR Government quantified the undesirable situation to lobby for landfill extension. Instead, feedback drew people's attention towards the problem of "odor nuisance and



undesirable air quality”. Local residents from TKO and Tuen Mun together with politicians staged hunger strikes outside LegCo and expressed that the HKSAR Government had done not enough in the aspect of waste reduction and recycling¹ (Sky Post, 2013). Amid controversy, the HKSAR Government withdrew the SENT landfill extension proposal. Lawmakers ultimately decided to adjourn the discussion about NENT and WENT landfills.

The EPD recognized the aforesaid problem and therefore launched a deliberative polling on the issue of landfill extension in the cooperation with the Radio Television Hong Kong in August 2013. During the discussion, Christine Loh emphasized the pressing need while Louis Ho focused on proper degree of landfill extension. Louis Ho viewed that the three landfills were necessary because of regional demand and logistics concern. On opposite side, Fernando Cheung requested for a thorough strategic plan of waste management in advance whilst Christine Fong expressed her concern of health hazard to local residents. It is observed that policy actors defined the problem differently. The case of landfill extension exactly proves the argument of Kingdon (1995) that unanticipated outcome would be resulted when feedback is not in line with the administrative

¹ In June 2013, before the start of PWSC meeting, LegCo member Gary Fan staged hunger strike for 25 hours while District Councilor Christine Fong and local residents from TKO staged hunger strike for at least 35 hours in order to voice out their discontent. In light of the success won by TKO citizens, residents from Tuen Mun with their District Councilor staged one-day hunger strike before LegCo discussed NENT and WENT in Financial Committee meeting.

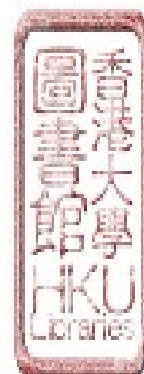


intent.

Focusing Events

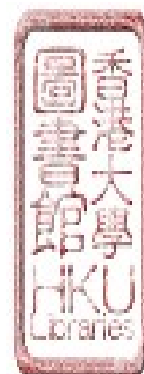
Unlike other social issues, the landfill extension proposal was not supported by focusing events such as natural disasters, crises, personal experience and symbol as mentioned by Kingdon (1995). To the contrary, those focusing events related to human intervention because people were unsatisfied with HKSAR Government performance in the aspects of landfill operation and waste management. The controversy over the SENT landfill extension, Judicial Review (“JR”) in respect of Integrated Waste Management Facilities (“IWMF”) and a series of hunger strikes held last year drew public’s attention towards the problem of MSW. More people around the HKSAR Government tend to make use of various accountability forums such as LegCo, Court and social forum to hold policy actors accountable (Bovens, 2008). However these acts would hinder the HKSAR Government from making policies to tackle with pressing problems promptly.

(a) *The controversy over SENT landfill.* In view that sole reliance on NENT and WENT landfills would increase traveling costs and cause adverse impact on environment during the long-distance transport of waste, EPD proposed the



encroachment of around 5 hectares into the Clear Water Bay Country Park (CWBCP) (EPD, 2007 & 2014b). However, the HKSAR Government met LegCo's opposition even though the HKSAR Government was willing to reduce the area of CWBCP. Finally, LegCo passed a motion to block the Order. This also led to EnB's abandonment of its associated funding request for IWMF and landfill; and the HKSAR Government's subsequent announcement that no funding request would be filed in the Tsang administration.

(b) *JR in respect of IWMF*. In the 2005 Policy Framework, the Government targeted that half of MSW would be recycled, a quarter would be disposed at landfills and the remaining quarter would be treated in IWMF (EPD, 2005). The IWMF, having multi-function of "waste separation, incineration and turning waste into energy" was scheduled to commission in 2010 (HKSAR Press Release, 2010). This time the HKSAR Government was challenged by its opponents who made use of JR. (*Leung Hon Wai v. Director of Environmental Protection and another*, 2013). Considering urgent need of landfill space and the unexpected result of the JR, the Leung administration which assumed office in July 2012 opted to push landfill extension alone onto the agenda. Although the HKSAR Government won the case in the said proceedings in July 2013, the court action delayed the construction of IWMF facilities.

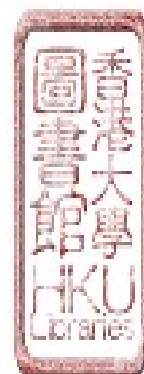


(c) *The 2013 Hunger Strike Protests.* The hunger strike protests in 2013 showed how politicians and local residents drew peoples' attention towards their perceived problem in social forum. Due to the hunger strikes performed by Gary Fan, Christine Fong and TKO residents, the HKSAR Government was unable to secure the votes of Democratic Alliance for the Betterment and Progress of Hong Kong ("DAB"), leading to the withdrawal of SENT landfill extension proposal. (South China Morning Post [SCMP], 2013b). Thereafter, Tuen Mun residents staged another hunger strike and were supported by members in the LegCo². Finally, the administration suffered from another setback in the funding request for NENT and WENT landfill extension (House News, 2013).

Budgets

Comparatively, budgets exert less influence than the three aforesaid factors at this stage. Budget at some specific moment constraints the Government from selecting some alternatives and in some other circumstances promotes items to higher ranks on the Government agenda (Kingdon, 1995). Although the administration emphasized the importance of landfill in the waste management

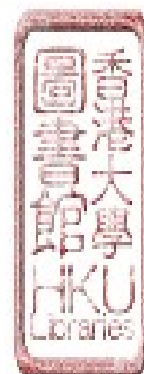
² Wu Chi-wai of Democratic Party decided to raise a motion to terminate the debate about NENT and WENT landfill extension and James Tien of Liberal Party supported Wu's idea. Additionally, legislators from the Hong Kong Federation of Trade Union and Lau Wong-fat voted against the proposal as well.



chain (EnB, 2013), Audit Commission suggested that Hong Kong should reduce its reliance on landfill because landfill used up large portion of land and the HKSAR Government had to spend substantial amount of public fund to build and operate landfills (Audit, 2008). This reveals that budgetary consideration is involved in policy-making process. However, it is premature to examine the degree of influence to the issue of landfill extension since up till this moment the issue has not yet been discussed in the finance committee meeting.

Problem Definition

In the opinion of Kingdon (1995), problem defines as perceptual and interpretative element rather than simply a condition or external event. Great political stakes in fact affect the framing of problems. Thus, it is necessary to recognize how policy actors put efforts to bring problems to public and Governmental attention. Rochefort and Cobb (1994) suggested that policy-makers took the severity, incidence, novelty, and proximity and crisis nature of an issue into account. In this case, the SKDC engaged consultants to conduct a study relating to the severity of odor nuisance in TKO. In additional, local residents from TKO and Tuen Mun voiced out their dissatisfactions as landfill sites “hit close to home or directly impinges on a person’s interest.” The

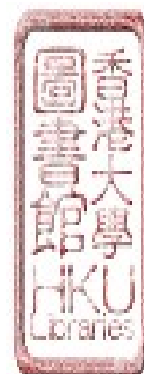


residents continue enlarging their base via emphasizing personal connection and successfully draw people's attention on the operation problems of landfill.

Considering the failure of the 2013 landfill extension proposal, the HKSAR Government has framed the problem with the following detailed explanation in a newspaper advertisement (Metro, 2014) the new landfill sites will reach full capacity one by one in the coming 5 years. Meanwhile, IWMF can only be ready not earlier than 2022 while all large-scale infrastructure projects need at least 10 years for planning. Additionally, since IWMF can only convert one-third of domestic wastes to energy, the three landfills are all necessary. Thus, Hong Kong needs to expand all the three landfills and construct IWMF at the same time. To mobilize the whole society to accept the proposal, the HKSAR Government has planned to implement other alternatives such as waste reduction and food wise Hong Kong campaign and promised that Hong Kong no longer requires relying on landfills in the future.

The Policy Stream

Kingdon (1995) argued that proposals in (this) community are similar as molecules floated around in what biologist call the “primeval soup” before life came into being. While many ideas float around in this policy primeval soup,

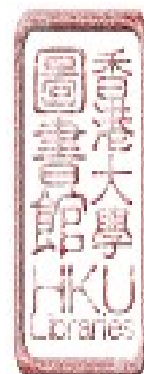


the ones that last, as in a natural selection system, meet some criteria (Kingdon, 1995, p.116-117).

Policy Community and the Policy Primeval Soup

Hong Kong has relied heavily on landfill as the end-of-pipe solid waste disposal site since 1950s (EPD, 2001) where landfill has been started floating on the policy primeval soup. The HKSAR Government estimated that about 10,000 tonnes of waste would still require being disposed every day in 2017, notwithstanding the implementation of other waste reduction initiatives (LC Paper, 2014).

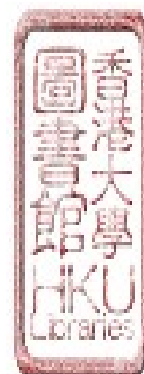
Expiry of landfill capacity was not a new topic. The HKSAR Government recognized the three landfills would reach its design capacity in early 2000s. Thus, a strategic feasibility study was conducted in 2000 to study expansion of the three strategic landfills and find suitable sites for new landfills. Detailed feasibility and environmental impact assessment were subsequently carried for the SENT, WENT and NENT landfill extensions by 2010s. In 2005, HKSAR Government issued “Policy Framework for the Management of Municipal Solid Waste (2005-2014)” (“Policy Framework”) set out the targets for 2014 to reduce MSW generation by 1%, increase recovery rate to 50% and reduce MSW disposal of at landfills by 25%. The Policy Framework proposed a comprehensive set of



policy instruments on management solid waste, including Producer Responsibility Scheme (PRSs), MSW charging, landfill bans, etc. (EPD, 2005).

To increase the public acceptability, an open forum on the Policy Framework was held by the Advisory Council on the Environment (ACE) in 2006 to obtain public opinion and make recommendation on the Policy Framework. After consideration the public view on the forum, ACE, in general, supported the policy measures, including territory-wide source separation of domestic waste, MSW charging, PRSs, landfill disposal bans, IWMF, and landfill extensions, etc. (ACE Paper, 2006). It was considered that the landfill extensions proposals obtained public support at that time supporting its survival in the policy primeval soup.

However, the destinies of these policy measures were different. Construction Waste Disposal Charging Scheme, legislation of Product Eco-responsibility Ordinance and the subsidiary PRS on the environmental levy scheme on plastic shopping bags were successfully implemented in 2005, 2008 and 2009 respectively. On the other hand, the MSW charging required years of time to further trial and consultation. The progress of landfill disposal bans and PRSs on other products, e.g. glass beverage bottle, rubber tyre, batteries, etc. were unknown. IWMF and landfill extensions were encountered vigorous opposition

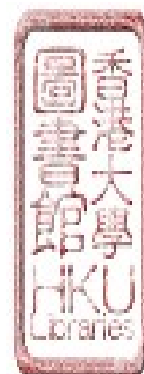


in local community and political arenas which are discussed in details in this project.

Chief Executive, CY Leung, reinforced the importance of IWMF and landfill extensions in the 2013 Policy Address, “with the use of the advanced Integrated Waste Management Facilities, we can turn waste into a resource. This can also reduce waste and alleviate the pressure on landfills. Expansion of landfills is an integral part of the overall strategy of waste management. To make this basket of policies a success, all of us should play our part” (Policy Address, 2013).

Softening up

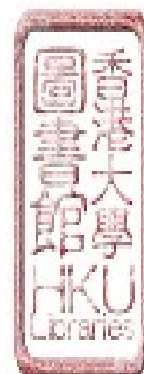
It is important for policy entrepreneurs to soften up the policy community, including general public, specific advocates and the congress (i.e. the legislative council in Hong Kong context) (Kingdon, 1995, p.128). The environment secretary had long been softening up the specific groups of experts and academics the needs for landfill extensions. Experts and green groups, including The Conservancy Association, Friends of the Earth (Hong Kong), Greenpeace, etc., were engaged in the discussion of landfill development in 2001 (EPD, 2001) to seek their views on solid waste disposal plan and formulate planning for new landfills. A positive atmosphere had been created in the specialist community on



landfill extensions over the years. However, the entrepreneurs failed to rally support from the general public. Public engagement on landfill extensions proposals is limited which only relied on the statutory public inspection period of environmental impact assessment report for the landfill extensions. The HKSAR government underestimated the power of local community which finally influenced the legislative councilors in both pro-establishment and pan-democratic camps to veto down the proposals in 2013. Further to the failure in 2013, EnB started to engage and bargain the district council in Tuen Mun and Tseung Kwan O directly and publicizing the needs for landfill extension in various media, including poster in railways and bus-stop, television and radio advertisements, etc. With these reinforced efforts, the general public had been softened up and the landfill extension proposal was ready to come up. Detail political analysis would be discussed in policy stream and political mapping analysis in Chapter 5.

Criteria for Survival

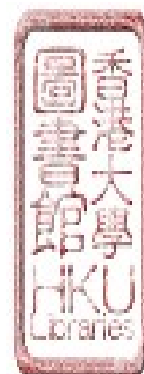
Ideas float in the policy primeval soup and bump into each other and combine with one another; some survive and some die out; some survive in different way from their origins. Two criteria for survival are technical feasibility and value



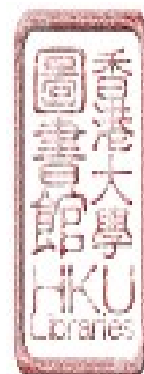
acceptability (Kindgon, 2005, p.131). EPD had carried out scientific quantitative analysis on the capacity of existing three landfills over the years based on the MSW disposal rate, recycling rate, economic and population growth. In addition, IWMF was proposed to be located at an artificial island near Shek Kwu Chau which required reclamation. It would take about seven years for reclamation, construction and commissioning while the landfill extension would only require a few years for site formation works (LC Paper, 2014). Thus, technical feasibility of the two projects leading to the package of 3 landfill extensions and IWMF and successfully granted PWSC approval in 2014. This success was also supported by the shred value created by the satisfactory publicity of imminent need for expanding landfill to extend its lifespan to buy time for other waste reduction and recycling policies to put in place.

Policy Entrepreneur

With reference to the previous Chapters in this project, there are many factors affecting the process of agenda setting especially different participants also play the prominent role inside and outside the Government. Kingdon (1995) considered the President, Politicians, and the non-government parties such as media, concern groups and opinions from the public would also affected the

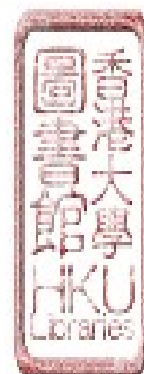


agenda setting Their involvement in pushing forward the proposals cannot be neglected. Changes on the composition of the members of LegCo and District Councils, all the unresolved tensions and conflicts, ineffective leadership may occur.(Kingdon , 1995) Nevertheless, some political events from the HKSAR Government such as District Council election in 2016 and CE Election in 2017 might also create new problems. The members may try to use the chance of meeting to attack the HKSAR Government and especially focuses on EnB or other related government departments. The forces which come outside the government would trigger the formal agenda in the Government. Kingdon (1995) emphasized that policy entrepreneur plays an important role during the process of setting the agenda. The alteration of the agenda may bring about the changing in the power of the concern parties. It may also affected by the changes of in the process of elections. The HKSAR Government should be aware of the above changes that the problems may turns out to be a political crisis. It may draw the attention of policy entrepreneurs by requiring some urgent solutions. And open up an opportunity of influencing the Policy Entrepreneurs In Kingdon's (1995), Policy Entrepreneur is a specific terms to describe the actors with the understanding, strength and good fortune to manipulate to grasp the opportunity for open up the windows. They usually play a significant role in the process of



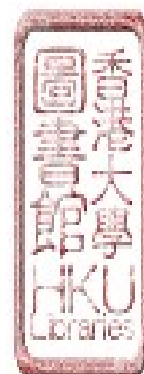
coupling.

An elected member of Sai Kung District Council (“SKDC”), Ms Fong Kwok Shan, Christine, is a successful entrepreneur because of her persistent performance; she could fulfill the criteria that Kingdon has mentioned. She is willing to invest her all her money and time for fighting with the Government. She always expresses her strong views for stopping the landfill extension proposal on behalf of the TKO residents because she is one of the residents of LOHAS PARK in TKO. She is a well-connected politician with good negotiation skill. She has reputation because of her well known image as “NeZha” and her performance as an actress for over 20 years ago would help her for image building in serving the TKO community. In order to stop the proposal of landfill extensions, she staged a hunger strike with TKO residents for 35 hours in June 2013. One year later in May 2014, the PWSC considered the funding proposal of "a bunch of a furnace," that is the extension of TKO landfill and the incinerator project. She constantly demonstrated a protest in the public gallery and the meeting has been interrupted and deferred again for the fourth meeting. On 12 July 2014, after the rehearsal of “Occupy the Central”, she grasped the chance of the mess of LegCo and taken a “bloody shower “all over her body in a public place. She criticized the HKSAR Government for pushing forward the agenda



of landfill extensions and accusing that the government officials were ignoring the voice of the public. She claimed that, EnB and EPD were sacrificing the health of the public.

In pushing the agenda setting of landfill extension, there are two more Government Officials also played an important part of it. Mr KS Wong, Secretary for the Environment and Ms Christine Loh, Undersecretary for the Environment have been appointed since July and September in 2012 (HKSAR, 2009). Before joining the HKSAR Government, both of them were heavily involved in the public engagement process for promoting the sustainability development in Hong Kong. KS is a registered architect with over 20 year's experiences; he has been contributed much to the work of the advisory bodies in the HKSAR Government. He is a founding committee member of the Hong Kong Green Building Council, His expertise was promoting green building and building energy efficiency over the past ten years (HKSAR ,,2012). Meanwhile Christine Loh was a former Legislative Councilor since 1992 to 2000. She has a nickname "Angel of Environment" because of her persistence in protecting the environment. Her excellent presentation skill and good image could assist KS Wong for supplements his weakness.



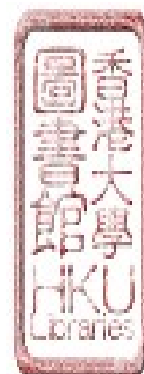
The Political Stream

While the problem, policy and political stream are independent to each other, political stream constitutes public mood, pressure group campaigns, election results, partisan or ideological distributions in legislature and changes of administration (Kingdon, 1995, 145) which has significant influence on agenda setting. In particular, it is considered that public mood, change in administration, election, and organized political force have important impact on Government's agenda.

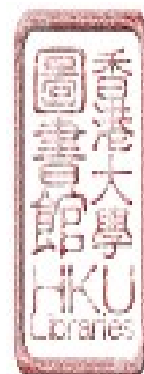
Public Mood

The Government started feasibility study on extending existing landfills in 2000 to identify suitable new sites for landfills as the Government foresaw the landfills would be filled up in the coming decade (EPD, 2011). However, the Government put forward a comprehensive landfill extension plan to LegCo for funding approval in June 2013. The public mood in Hong Kong society has swung vigorously during this 13 years, altering Government agenda and policy outcome.

The survey on people's appraisal of governance, conducted by the Public Opinion



Programme, indicated that the Government appraisal (GA) was the highest in 2005 to 2007 (about 120 out of 200) while the GA was the lowest since 2011 (about 80 out of 200) (Public Opinion Programme, 2013). The HKSAR Government popularity reached the highest because the society overall had an optimistic expectation on the Tsang's administration after the governance of the ex-chief executive, Mr Tung Chee-hwa. Unfortunately, Tsang's administration honey moon period could not last long and his popularity dropped after a series of policy failures, e.g. the illegal structures of Principal Officials' flats, non-local pregnant women giving birth in Hong Kong, national education, etc. Hong Kong Government was experiencing an overall anti-government mood hindering policy implementation. Sense of community mood of Governmental participants serves to promote their agenda or restrain other proposals to prominence (Kingdon, 1995, p.147). Instead of putting a controversial landfill extension policy during the more conducive public mood period, the Tsang's administration (2005-2012) preferred the Environmental Levy on Plastic Shopping Bags (Levy Scheme), a milder policy measure, in 2009 to try to add credit to his political profile. As a result, the succeeding Government had no other choice but putting forward landfill extensions proposals as it is considered the only means to solve the imminent problem of landfill saturation in the coming few years, regardless

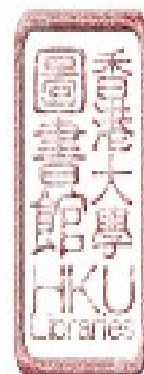


the overwhelming anti-government mood in 2013. Not surprisingly, the proposal was veto down in the council contributed by the negative community mood in June 2013.

Change in Administration

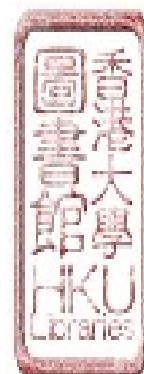
Administration change brings a marked change in policy agenda because of major participants change. Change in personnel brings in new priorities onto the agenda. The first year of a new administration is clearly the prime time for preoccupation with the subject of change (Kingdon, 1995, p.153-154). The project will discuss the policy on MSW in the time of major changes in government officials.

In 2005, Tsang was elected to replace Tung for his resignation without opposition for 2-year term. Ms Sarah Liao, the Secretary for Environment, Transport and Works, announced in December 2005 the Policy Framework stating clearly that landfill extension was in the top priority since the existing landfills would reach its capacity in 6-10 years (LC Paper, 2005). Mr. Edward Yau was appointed as the Secretary for Environment when Donald Tsang started his full terms of chief executive in 2007. He changed the policy priority from landfill extension as set in the Policy Framework to other initiatives which focus on the PRS in which the



Levy Scheme on Plastic Shopping Bags (“Levy Scheme”) was implemented in 2009. The distribution of plastic shopping bags by registered retailers was reduced by 90% (HKSAR Government, 2010) after 1 year implementation which was considered as a great policy success while landfill extension proposal was put aside. It is revealed in 2011 that the implementation of Levy Scheme worse still the plastic bags problem as the so called usage of environmental-friendly bags (non-woven bags) increased more than 90% which consisted of 30 times plastic material than ordinary plastic bags (The Sun, 2011). The policy outcome of Levy Scheme is in doubt.

In 2012, KS Wong, Christine Loh and Michelle Au were appointed as Secretary for the Environment, Undersecretary for the Environment and Political Assistant of the Environment Bureau respectively under Leung’s administration. All of them had a prominent reputation in environmental field. KS Wong has persistent contribution in green building. Christine was, an ex-legislative councilor, actively involved in Victoria Harbour protection and is the co-founder of Society for Protection of the Harbour and Civic Exchange while Michelle Au was an environmental activist who had worked in Friends of the Earth. This demonstrated CY Leung’s strong determination to reinforce policy capacity in environmental envelop to overcome vigorous opposition to bring the landfill

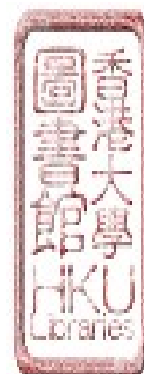


extensions on top priority. It is observed that change in administration had catalyzed landfill extensions to government agenda, notwithstanding that other factors in the political stream were against it.

Election

During election period, politicians would make judgment on how receptive the public is to Government policy. They also weigh up the balance of interest group opinion and assess the political cost of going against the tide (Cairney, 2012, p.236). The political environment in district council and LegCo is more diffused before election as the council members are competing with each other. They would define problems in such a way to favor their voters, instead of conventional problem definition logic in accordance with their political values. Therefore, the Government faces absolute difficulty to foster support for the debatable policies from either pro-establishment or pan-democratic parties. Thus, election year of District and LegCo in 2011 and 2012 respectively was not an appropriate timing for the controversial landfill extension proposal.

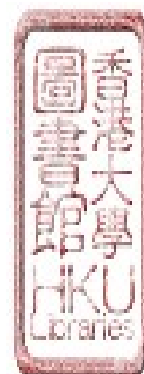
The Government understands the election effect thoroughly. In 2010, the proposal of SENT landfill extension of 50 hectares which encroached part of Clear Water Bay Country Park was failed due to strong opposition from green



groups to protection the sacred country park area (LC Paper, 2013). Edward Yau did not continue landfill extension proposal persistently because 2011 and 2012 were election years. In CY Leung administration, EPD speeds up landfill extension proposal in 2013 and 2014 which is the only possible policy window during their terms of service since the policy window would not opened in 2015 and 2016 as it is the election year for district and LegCo again.

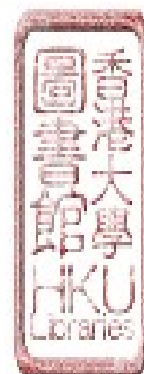
Organized Political Forces

Kingdon (1995. P.150) argued that organized political forces are combined with interest group pressure, political mobilization and behavior of political elites. In Hong Kong political context, there is no ruling party in the Government while there are 19 political parties and some independent legislators in the LegCo where the arena for policy legislation and debate. Although most of them can be considered as either pro-Government or pan-democratic, the political force in the LegCo are very diffused in the recent years due to the overwhelming anti-Government mood over the society to CY Leung's administration. The entire political environment over the society is turbulent. Without exception, landfill extensions proposal are exposed to diverse views among the society. Some environmentalists and local residents of Tsuen Kwan O opposed landfill



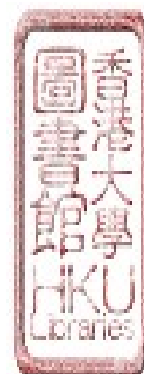
extensions with no compromise while the waste experts and scholars support landfill extensions, including Prof. Jonathan Wong of Hong Kong Baptist University and Prof. CS Poon of The Hong Kong Polytechnic University. They understood that three landfills will be filled up by 2020's while other waste management policies, including MSW charging scheme and IWMF could not be timely in place. Oppositely, green groups are of different views. Green Sense held a strong stance on a full waste management policy instead of solely relying on landfill (South China Morning Post, 2013a). Moreover, the discussion inside LegCo is very vigorous that about one third of the legislators were indecisive on the proposal (South China Morning Post, 2013b). It is obvious that no organized force for landfill extensions was formed in the political arena in 2013.

Consensus is built in the political arenas by bargaining rather than by persuasion. In other words, it is a process of trading provisions for support, or compromising from ideal positions that will gain wider acceptance but not arguing logically and rationally on the basis of technical feasibility and vitality (Kingdon, 1995, p.199). The Government was failed to gain consensus in June 2013 mainly because they had been adopting persuasion approach to persistently explain to the citizens on the degree of seriousness of MSW problem Hong Kong is facing, e.g. the landfills will be filled up in about 2 to 6 years. Bargaining was started at the very late



stage when the PWSC meeting was approaching in June 2013.

Over the years, EPD had put in place odour remediation measures at landfills to minimize its nuisance to nearby local residents as shown in Appendix II. However, these measures could not successfully ease the local tension. On 24 June 2013, KS Wong issued an open letter to Tsueng Kwan O residents to lay down odour, air quality and hygiene remedial measures as bargains for SENT landfill extension. Measures include restricting SENT landfill to only accept construction waste with no odour issue after extension and \$10 million will be granted to retrofit private refuse collection vehicles (RCV) for installation of tailgate and leachate collection system to alleviate RCVs' odour and hygiene problems (HKSAR Government, 2013). The local residents resist accepting the bargains as it came at the very late stage and they only want SENT landfill to completely close down. Worse still, Tuen Mun residents stepped up to protested against the proposal because the odorous MSW originally designated to SENT landfill will be diverted to WENT landfill at Tuen Mun. Ir Christine Fong Kwok Shan, Sai Kung District Councilor, successfully influenced the LegCo members to veto the extension proposals, and finally Government withhold SENT landfill extension, by leading a hunger strike at the time of PWSC meeting in June 2013. However, the Tuen Mun and Ta Kwu Ling landfill extension was successfully

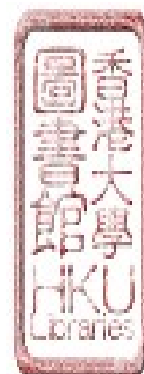


approved by the Subcommittee, although the Tuen Mun residents were frustrated by the decision and continued to protest against the funding application of extensions proposals.

With a view of the increasing protest against landfill extensions, the Chief Secretary, Ms Carrie Lam, attempted to lobby Tuen Mun stakeholders in the district council meeting on 11 July 2013 to foster local support on the funding application. She offer some compensation for bargaining for support of the landfill extensions, e.g. improvement of Nim Wan Road, increase in waste portion to use marine transfer to reduce roadside RCV disturbance, rezone of Tuen Mun crematorium, etc. Moreover, CY Leung, Chief Executive, claimed the society owed Tuen Mun residents for their tolerance of polluting facilities in their district (South China Morning Post, 2013). Unfortunately, the bargaining came one day before the Financial Committee meeting which was considered too late. Tuen Mun residents did not accept the bargain and continued to protest against the landfill extensions and even escalated to start a hunger strike on the Financial Committee meeting day and finally legislators veto the proposal.

Policy Window in 2013

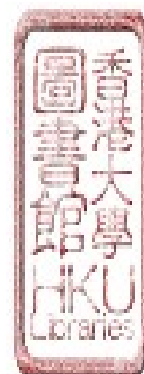
Policy window opens when three independent streams, i.e. problem stream, policy



stream, and political stream, converge at the same time when problem is recognized, policy solution is developed and available in the policy community, and political change (Kingdon, 1995). Conversely, each stream will act as a constraint to each other to restrain policy agenda (Kingdon, 1984, p.19). We will evaluate in the following whether the three streams aligned when the Government put forward landfill extension proposal to LegCo in June 2013.

The policy stream

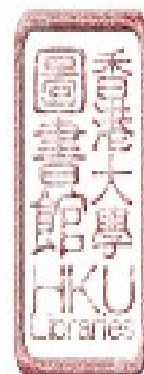
Landfill extension proposal has been survived in the policy primeval soup for more than 10 years because it is a locally proven technology. However, the Government did not endeavor to “soften up” the resistance among the local community and political arenas before June 2013. EPD started to review the potential of landfill extension and discuss with waste experts and professional from 2000’s. Although the idea of landfill extension was started inside the expert community since 2000, such early stage discussion of landfill extension did not involve the general public and political actors. The late lobbying and bargaining with the stakeholders were considered as measures to rally supports which fail to build public trust on the Government’s comprehensive solid waste management strategy.



The problem stream

Starting from the early stage of development of landfill extension proposal in 2000, the Government had considered the problem as “insufficient landfill space” which is directly led to expansion of landfill space as its solution. In order to foster support from general public, the Government from time to time publicized the surging rate of volume of waste and the rapid filling up rate of the three landfills. However, the major stakeholders, the local residents and district councilors do not conceive “insufficient landfill space” as the problem. Their major concern is the hygienic and odor problem attached to the operation of landfills and the refuse collection vehicles. The discontent in problem definition between the Government and public hinders the policy window.

Nevertheless, a series of focusing events have accelerated the rise of landfill extension agenda in 2013. The SENT landfill extension entrenched Clear Water Bay Country Park was veto down in 2010. Following the failure in 2010, EnB announced that landfill extension would not be submitted in the rest of Tsang’s administration. JR on the environmental impact assessment report of IWMP has interrupted Government agenda of incinerator. Due to the failure of above focusing events, we are closer to the time of saturation of landfill capacity without

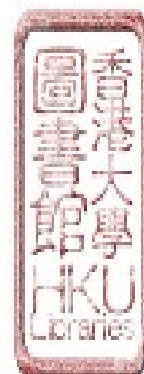


any new measures to extend landfill space in place. This is the core factor to push landfill extension to the top of government agenda in 2013.

The political stream

Political stream was the major hurdle in landfill extension in 2013. During that time, the political environment was unfavorable to any controversial policy proposal. The Government appraisal was historically low and the anti-government mood was high attributed by the criticism on Leung administration's legitimacy (689 votes cast out of 1050 valid votes in the Chief Executive Election (HKSAR Government, 2012) and credibility (illegal structure scandal) at that time.

Over the community, the extension proposals experienced strong resistance due to "Not in My backyard (NIMBY)" mentality and rent-seeking behavior. Some local residents do not have strong view on landfill extension given that it is not close to their home. If the waste treatment facility is situated near their home entrenching their personal interest in terms of living environment, flat price level, people will step up to against it. The residents requested some bargains which did not related to solid waste issue, such as request the Government to fix the water leakage at Siu Hong shopping mall, request for swimming pools, etc. This

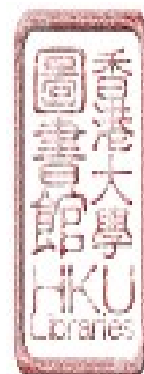


can be explained by Kingdon's argument that when opportunities come along, participants will bring their problems to the deliberations, hoping that decision makers will solve them, and also bring their proposals, hoping they will be adopted (Kingdon, 1995).

Review of Policy Window in 2013

The problem definition of "insufficient landfill space" is distorted by local representatives as "hygiene and odor" problem due to NIMBY and rent-seeking behavior. Although the landfill extension in 2013 driven by the series of focusing events, it seems that the legislators still considered that there are some time lapse for the landfill to be filled up. While Kingdon argued that when the issue was not "really hot", advocates held firmly to their extreme positions rather than compromise (Kingdon, 1995), the legislators did not conceive the MSW problem as "really hot" while the Government did.

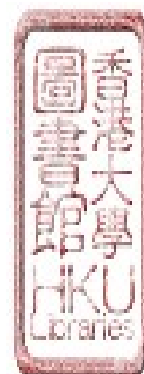
Kingdon argued that each participant has a stock of political resources, and exhausts those stocks. The resources are finite which cannot be spent on everything at once. If the Government insists on action on everything at once, their insistence might jeopardize the items on which they could reasonably expect action (Kingdon, 1995). In the context of landfill extensions, the administration



ted three landfill extensions proposals into one. This action overspent the political resources of the legislators that even the landfill extension at Ta Kwu Ling, where less inhabitants at its vicinity, has a higher chance to be supported as it has less resistance than TKO and Tuen Mun, all three proposals were not supported at the same time. Although the proposal of SENT landfill extension was withdrawn on 27 June 2013, it was considered to be too late. The withdrawal even triggered Tuen Mun and Ta Kwu Lings local residents' vigorous protest campaign and finally influenced the legislators, even pro-democrats camp, veto down the proposals of WENT and NENT landfill extensions at the PWSC meeting on 12 July 2013. It is considered that policy window was not open in June 2013.

Policy Windows in 2014

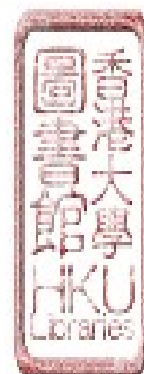
To the Government, it is not easy to perceive the presence and absence of policy window. However, when the Government realizes the problem is compelling, it tends to be more flexible and eager to hook the three streams by different means in order to stay in the game of agenda-setting. To succeed, policy entrepreneurs have to wait for the open of policy window and when waiting, they continue developing their pet solutions and softening up the system in order to take



advantage of policy window when it is opened (Kingdon, 1995). After the failure to push landfill extension proposal onto the agenda in 2013, the HKSAR Government put much effort on refining problem, recombining existing ideas in policy primeval soup and softening up the mechanism so as to couple the three streams together.

The problem stream

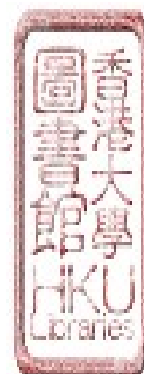
The different perceptions of the MSW hinder the landfill extension proposal from gaining salience on the policy agenda. To response, the Government fine-tunes the definition of MSW problem but continues to put emphasis on insufficient landfill capacity. In April 2014, the EPD published a newspaper advertisement to promote the essence of 3 landfills plus IWMF. It disclosed that the EPD was unable to construct IWMF and implement other large-scale projects before expanding landfills because those projects were time-consuming (Metro, 2014). In May 2014, it highlighted the problems of both construction waste and MSW, instead of solely MSW problem, when it reminded the citizens that Hong Kong was facing the challenge arising from waste management problem in a television advertisement (EPD, 2014). It is observed that the Government keeps refining the problem so as to hook their proposals to the problem.



The political stream

It is not enough for policy entrepreneurs to ensure the solutions are public acceptable and political receptive. If public interest groups such as environmental action groups and civil society are able to draw the attention of media which is powerful in influencing policy agenda, they will have a greater chance to succeed in changing the agenda because the media not only grasp public attention but also the attention of politicians who in turn affect the agenda through their own platforms. In the political arena, consensus is built via bargaining process (Kingdon, 1995). In this case, the Government has learnt lessons from the setback in 2013 and successfully built coalition with pro-establishment camp to secure the votes. The Government, with the support of the pro-establishment camp, got an approval in Environmental Affairs Panel (EAP) (South China Morning Post, 2014c). Those from pro-establishment camp expressed before public works committee meeting that they would accept the proposals on some particular conditions³ (South China Morning Post, 2014d) but actually those conditions were some measures that the Government decided to implement in foreseeable future. Meanwhile, the Government has also attempted to bargain

³ Before public works committee meeting, DAB disclosed that they would support the proposal on the condition that the Government eliminated the adverse impact on the society whilst Michael Tien of the New People's Party said he would back the plan if the Government would not dispose of smelly MSW at the three landfills.



with local residents by offering sweeteners⁴ (South China Morning Post, 2013c & 2014a).

The policy stream

Policy agenda keeps changing to cope with developments in the problems and political streams. When the agenda changes, alternatives may be introduced.

Usually those alternatives are not new ideas but combination or recombination of existing ideas, which bump into one another, in policy primeval soup (Kingdon,

1995). Landfill is necessary in waste management chain because it is

unavoidable that some substances such as post-treatment residues,

non-recyclables and inert materials are required to be disposed of (South China

Morning Post, 2013a). However, it appears that it is not accepted in political

arena. In light of the 2013 failure of increasing the salience of landfill extension

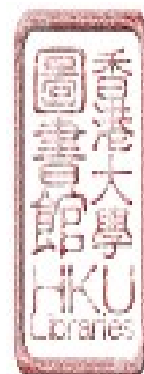
proposal, the Government has taken a series of actions to respond to the society.

The Chief Executive proposed to spend HK\$1 billion on recycling in January

2014. After a period of time, it packed the three landfills with IWMF as a whole

and subsequently recombined the whole package with waste reduction at source,

⁴ The Government offered creating a space of green belt to separate the WENT landfill from residential areas in November 2013. Other sweeteners include using cover-up rubbish trucks, establishing an air-quality monitoring station, adding funding for a footbridge across the Tuen Mun River channel etc.



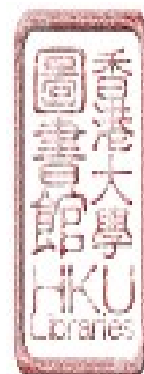
as a strategic plan to deal with the problem of MSW.

Opening of Policy Windows in 2014

Albeit the ultimate success in obtaining a pass in the EAP in March and subsequently in PWSC in late May, (SCMP, 2014) the road to success is not straight-forward. In January, the Government was forced to withdraw a funding request for preparatory work on landfill extension amid lawmakers' criticism. Afterwards, District Councilors from Tuen Mun declined the Government's sweeteners. At that moment, it is predicted that the opportunity of the open of policy window is dim. To increase the success rate, some celebrities like Bernard Chan helped promote the proposal for the Government (SCMP, 2014f). The Government got a pass in the EAP and prepared to seek approval in PWS meeting. The meeting was originally held in April but finally adjourned to early May because no consensus could be reached among the lawmakers who had diverse views on the issue (SCMP, 2014b). Lawmakers failed to finish the discussion due to filibustering and protest from audience in the second meeting and therefore the meeting was adjourned again (SCMP, 2014e).

In the issue of landfill extension, window is usually open in problems stream.

The area that the Government has to put effort is how to mobilize politicians and

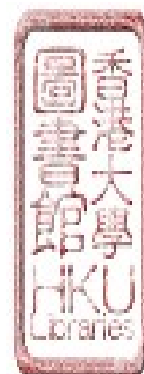


the public to accept the proposal. The Government has successfully built coalition with pro-establishment camp and gained votes from these parties. Although members from pan-democratic camp made use of filibustering to oppose the proposal in PWS meeting, the Government finally obtained approval from lawmakers, with the assistance of the chairman Lo Wai-kwok of the Business and Professionals Alliance. Lo, in consider of compliance of committee rules, ended the filibusters in the meeting held on the 21st of May and instructed not to allow new motions in the middle of the meeting on the 27th of May (SCMP, 2014f). As a result, both funding requests for SENT landfill extension and construction of IWMMF were approved in the two PWS meetings. Albeit the success, the Government has not yet gained local residents' consent to landfill extension up till this moment.⁵ It is opined that local residents' opposition will be the main source of challenges faced by the Government in the future.

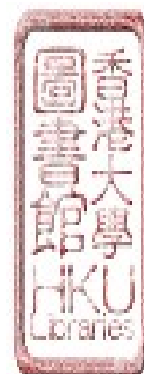
Uncertainty of opening of policy window in Finance Committee meeting

The recent finance committee meeting gives an instance to show the competition

⁵ The second public works committee meeting was forced to close partly because of the demonstration from the audience who were mainly from Tseung Kwan O. To ensure the third meeting could be held smoothly, Christine Fong and Tseung Kwan O residents were only allowed to stay outside the LegCo building during the meeting.



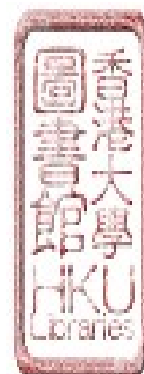
for space on the agenda. Due to filibustering in protest for funding for controversial proposal of the town development in northeastern New Territories, only 21 items on the agenda were approved before the summer this year. Discussion about the funding for landfill extension and incinerator construction will be delayed for at least three months (South China Morning Post, 2014g). In the opinion of Kingdon (1995), strategic considerations including limited political resources and the dangers in overloading restrain the number of issues lawmakers consider at a particular stage. It is observed that the Government has already put many resources on promoting the proposal and lobbying for support from politicians and the public. It is questionable whether they are able to continue to spend resources on the proposal of the three landfills plus IWMF because resources are not infinite. Further, the Government has actually promised to proceed with several projects at the same time and this may lead to the dangers in overloading. Most importantly, District Council election and LegCo election would be held in 2015 and 2016 respectively. Obviously politicians will feel constrained to compromise with the administration because they would normally give top priority to their voters' interests during this period in order not to affect the election result (Kingdon, 1995).



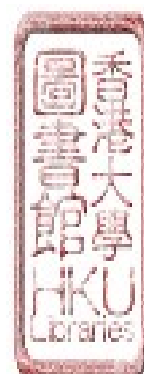
Concluding Comments

Hong Kong has long relied on landfills as the end-of-pipe MSW disposal facilities over the decades. Government has formulated comprehensive strategy to tackle the MSW problem in addition to landfill by issuing the Policy Framework for the Management of Municipal Solid Waste 2005-2014” and “Hong Kong Blueprint of Sustainable Use of Resources 2013-2022” in 2005 and 2013 respectively. The three streams analysis demonstrated the driving force to lifting landfill extensions and incinerator in Government’s agenda. The HKSAR Government recognized the MSW problem as the filling up of landfill capacity which leads to the solution of expansion of landfills. Landfill extensions survived in the “policy primeval soup” due to its proven technical feasibility and value acceptability among other tools.

The administration put forward the landfill extension in 2013 to LegCo but in vain. It was observed that the three streams did not converge at all, such the discontent of problem definition of MSW between the Government and local residents, the failure of policy entrepreneur to “softening up” the resistance from local community, pan-democratic parties, the overwhelming anti-government mood, over-consumption of political resources.



The second opportunity was in 2014. The Government successfully rally political support from pro-establishment camp with a series of measures to reduce odor and air pollution impact on local residents and proposals of other policies tools, such as Recycling Fund, PRS, OWTF and IWMF. The filibuster on the SENT landfill extension ended in PWSC meeting on 21 May 2014 and the policy window was considered as open.

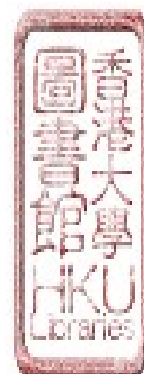


CHAPTER FIVE: BEYOND KINGDON - POLICY MAPPING AND POLICY TOOLS

Introduction

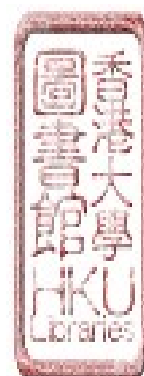
In Chapter Four, Kingdon's (1995) three streams model is adopted to analyze in detail the factors of each stream on the agenda setting of landfill extension policy in Hong Kong and the development of policy window. The main actors are policy entrepreneurs, who make use of opportunities to hoop policy proposals to the problem and push forward policies to the top of agenda when streams coverage.

During the application of Kingdon's model in Hong Kong solid waste management issue, it is discovered that the variables included in the three streams and the role of entrepreneurs, through comprehensive, could not fully reveal the complicated political dynamics of Hong Kong's political system. For example, while it highlights the resistance from local residents in TKO as well as the presence of policy entrepreneurs such as Christine Fong who strike on the proposal, they were not legislators and could not vote for the proposal in the LegCo. It is oversimplified to assume that the force gathered around the legislative council would automatically transformed into the defeat of the



Government at legislative stage, because at the current composition of the legislative council the number of law makers at the pro Government camp occupied over half of the seats and could pass controversial proposals even it faces public resistance. The current example that the proposal of North East New Territories New Development Areas is passed in the financial committee even it faces unanimous objection by the pan-democrats (SCMP, 2014g). Therefore, it is needed to depict a more detail political landscape in Hong Kong to understand the dynamics of the political actors especially at the legislative stage. The policy mapping model presented by May (2005) assists in understanding the support and resistance of a policy proposal in this regard.

In the natural selection progress in the policy primeval soup in Kingdon's model, technical feasibility and value of choices are factors that affect this selection progress and policy entrepreneurs would frame the proposals to hook the problem. About the solid waste management issue in Hong Kong, the Government has adopted numerous policy measures to solve the problem apart from landfill extension. The explanation of a natural selection progress would be too vague to understand the nature of this policy measures and their selection progress on a complicated issue. Elmore's (1987) policy tool analysis helps in clarifying the nature of the solid waste management measures in Hong Kong and how the tools



could solve the problem.

Policy Mapping and Political Feasibility on Landfill Extension

While Kingdon's (1995) model provides a dynamic analysis on the interaction of three streams in the process of agenda setting, May's (2005) political feasibility ideas serve to map the support for, and opposition to, the landfill extension proposal in the context of the structure of the political system in Hong Kong.

The Executive

Hong Kong has a specific election system of the Chief Executive and LegCo that does not encourage party politics. It is legally required that Chief Executive could not be member of a political party (Chief Executive Election Ordinance 2012). The Chief Executive could nominate party members as core officials to form his cabinet, but he should calculate the support and resistance from other political parties as there is no one overwhelming parties in the LegCo. In reality there would only one to two party members among the crew of cabinet (Executive Council, 2014).

The LegCo

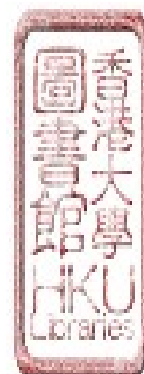
The LegCo has 70 seats and each half of 35 seats elected by a different method.



The 35 seats of District Constituency are elected by method of proportional representative that candidates are able to win a seat if a small percentage of citizens vote them (2012 Legislative Council Election, 2012). This method encourages candidate to present a distinctive image and does not favorable to unified strategy and action by big political parties. The result is that both the pro-government and anti-government camps divided into more and more political parties competing legislative positions. It also encourage the anti-Government politicians to perform radically because it could attract media attention and gain support from a small portion of citizens that generate sufficient votes to win a seat under proportional representative election.

The functional constituency is elected by qualified voters of specific industries, such as education, agricultural & fisheries, etc. In some constituencies the voters are representative of the enterprises while in some constituencies the voters also include practitioners (e.g. lawyer, education) (Voter Registration, 2014). The value of the votes is uneven between different constituencies and usually the voting results are cling to the status quo of the society which a pro-government.

According to Basic Law, Bills proposed by the Administration only needs 50% votes of all attending legislative members to get pass, while bills proposed by the

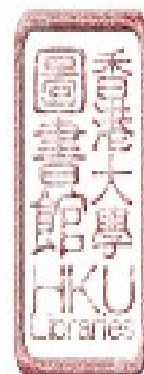


legislative members needs 50% of both functional & district constituencies to pass. Also, legislative members are prohibited to proposed bills that are related to Government expenditure, Government operation or political system. (Basic Law, 2012)

Voting Method and Strategy to Gain Support

Therefore, the chief executive of Hong Kong has the executive autonomy in carrying out policies and proposes bills, but without the back up of a ruling political party, the Government has to solicit support from legislative members to enact the policy proposals and acquire financial support. The legislative members, especially the District Constituency, have the mandate empowered by citizens and are more responsive to well beings of the general citizens, but with the limited authority to propose bill their biggest power is the veto power when the Government proposal goes against the interest of general citizens. To sum up, "The Government has powers but no votes; the LegCo has votes but no power" (Cheung, 2004).

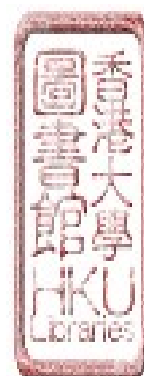
To solicit support from the LegCo, the Government would offer political benefit especially to legislative members from the pro-Government parties. Such bargain will be easier at the Functional Constituency especially those with small



voters base, because the interests of the representatives of enterprises of certain industries are less diverging comparing to the well beings of various citizens and the Government could satisfy more easily. In District Constituency, the legislative members from pro-government political parties would offer support to the Government more selectively because they also need to be responsive to the interests of general citizens.

District Council

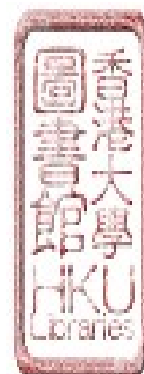
At the District Council level the political landscape is very different. Hong Kong has 18 Districts and each has a District Council. Each District Council, based on its population, is divided into many small sub-district, usually contains two to three streets or housing estates, each elect its district councilor. For example, Sai Kung District has 24 sub-districts and 29 members in its District Council (24 members elected from sub-districts, another three appointed members & two Ex-Officio members from Rural Committee) (Sai Kung District Council, n.d.). As the constituency of District Council is very small, the councilors are highly sensitive to the interests of its sub-districts and at the same time highly dependence on the resources and political support of their political party or alliance to sustain interest of their constituencies. Indeed, the positions of



District Councils not only functions as the foundation of support of political party at local level, it also serves as venues for political party to nurture their younger political tier. Such a political structure determines that district councilors are subordinate to legislative councilors of the same political party and they are weak in political influence. Most of the time, district councilors could not make any significant impact in the arena of LegCo. When there is a proposal that would affect the well beings of the local citizens, usually it is legislative councilors to make political deal and bargain with government officials and the benefit will be trickle down to the district council level through the channel of political party.

Breaking the Political Ecology

In the incumbent LegCo 2012-2016, the pro-government camp take 43 of the 70 seats which is over half of the LegCo (Legislative Council of Hong Kong, n.d.) This is a very favorable situation to the Government as if there is no strong resistance from the general public they could easily pass the bill without encounters the political barrier from the anti-Government camp. However, what has happened in LegCo in June 2013 about the Landfill extension goes against this political ecology. Maybe the Government is too confident with its advantageous position of legislative majority and does not have sufficient

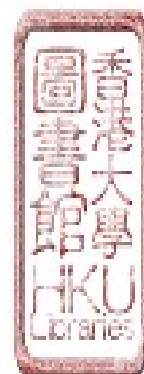


preparation on the unexpected attack from a district councilor Christine Fong (SCMP, 2013b).

Landfill extension is a waste management method that benefits overall while suffers some local residents. Residents in TKO have discontent on the nearby Landfill for long and are very resent to the extension proposal. Christine Fong, an independent district councilor in the TKO area, started a protest against the Government in the LegCo. Usually LegCo is not the arena for a district councilor as they usually have their representative in the LegCo from the same political party. To Fong, such a protest is politically profitable because she could gain media exposure and win the support of the discontented TKO residents. Under the proportional representative election method of the District Constituency of LegCo, the act of Fong could allow her a bigger chance to win enough votes to become Legislative member.

Her performance has threatened other district councilors in TKO area because they are afraid to loss support if their party leaders in the LegCo pass the proposal.

It explains why when Tam Yiu-chung, Chairman of the biggest pro Government party DAB, mentioned that his party would support the proposal, the district councilor of DAB rejected to follow him and claim that they do not support the

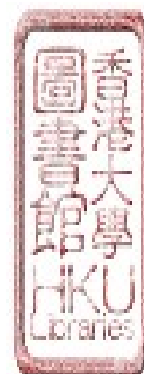


Landfill Extension (The Standard, 2013). Another political leader Lau Wong-fat, chairman of Tuen Man District Council, who is regarded as pro-government also expressed his deny to the extension proposal as he could not gain sufficient support from the District Council (South China Morning Post, 2013a).

Learning that the chance to pass the bill is rare, the Chief Secretary Carrie Lam, paid a visit to Tuen Man District to understand the requirement of the local residents. It is an unusual act of the high officials because their normal arena is the LegCo where they bargain with Legislative members. In this issue there is a mutual change of political arenas that a district councilor won at the LegCo while a high official failed in the district council. This is a break of the normal political ecology in Hong Kong.

Strategies to Resume Political Feasibility

May (2005) suggests several ways to gain political support and reduce resistance to enhance political feasibility, such as building coalition and co-sponsorship, improve visibility and reframe the proposals. It is found that the Government has adopted such strategies before re-submit the proposal to the LegCo. EnB produce two TV ad to explain the necessity of Landfill Extension as part of the total solutions of waste management. EnB also formulate a number of measures

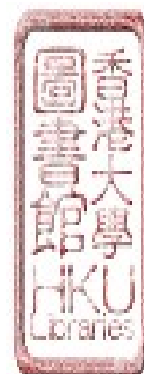


to reduce nuisance produced by landfill extension and post these measures in its website(EnB, 2014). These actions help to enhance visibility of Landfill Extension to all Hong Kong citizens.

Besides, the Government has launched the territory wide “Go Green Waste Less” campaign to promote the important of reduce waste production and cooperate with local parties to carry out the initiatives (NEWS.gov.hk, 2014a). It also provides a \$1 billion Recycle Fund to encourage the development of recycling industry (SOUTH CHINA MORNING POST , 2014). These actions help to building coalitions with the industry and local parties that the pro-Government legislative members and district councilors could have good defend the Government proposals.

Moreover, the Government also repackage the Landfill Extension Proposal to become "3+1" proposal (3 Landfill Extension + 1 Incinerator) to reframe it as part of a proactive total solution of solid waste management in Hong Kong instead of a passive proposal that without long term vision (NEWS.gov.hk, 2014b).

With the above strategy, the Government effectively resumes the support of the pro-government camp to the proposal though the voting is partly postponed by filibuster action by the radicals. Christine Fong still continues her eye catching

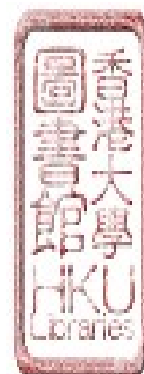


performance outside the LegCo, but it could not affect the pro-Government legislative members to vote for the proposals as the support at the level of District councilors are safeguarded.

The above policy mapping analysis explained why the Government failed to get the Landfill proposal passed with majority votes in the LegCo, and how it resumes its favorable situation by means of strategies on political feasibility. It helps to understand the dynamics in the political arena and how they led to the not open of policy window in 2013 and the open of policy window in 2014. One critical step of this change is the repackage of the landfill extension proposals to the 3+1 proposals. To explain why such repackage of policy proposals contribute to the open of policy windows, it is necessary exploring the nature of various policy tools concerning solid waste management in Hong Kong and how the new package had advantages over the previous ones.

Policy Tools for Municipal Solid Waste Management in Hong Kong

The policy stream discussion in Chapter Four demonstrated that landfill extensions survived in the “policy primeval soup” as it met the criteria of technical feasibility and value acceptability. In reality, the characteristics of



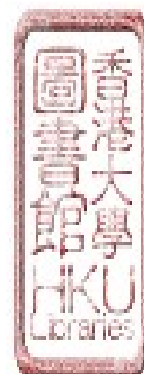
policy tools affected the priorities of policy actors.

While the landfill extensions among other alternatives (e.g. IWMF) survived in the “policy primeval soup” and thus rose to the top of the Government agenda, the landfill extension proposals did not gain approval from LegCo in 2013. In the following legislative session, the Government repackaged the landfill extension proposals to tie in with the IWMF to form the “3+1 proposal” which successfully passed the EA Panel. Subsequently, in 2014, the SENT landfill extension and IWMF won approval of the PWSC meeting.

Here, it is useful to discuss various policy alternatives in accordance with Elmore’s (1987) categorization of policy tools, namely mandate, inducement, capacity building and system changing. The categorization facilitates a critical review of important aspects of solid waste management in addition to landfill extension, and the power of the package of three landfill extension plus incinerator in winning LegCo’s approval.

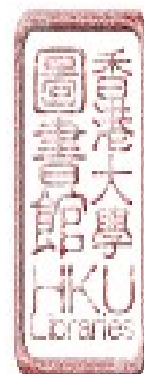
Mandates

Mandate refers to authoritative rules, e.g. laws, regulation and executive order such that individuals shall comply with (Elmore, 1987). Mandates are



considered as effective to have immediate policy outcome as most people at law-abiding. In 2006, EPD introduced Construction Waste Disposal Charging Scheme. Under the Scheme, disposal of construction and demolition wastes are charged in different rate at different waste disposal facilities in which the rate at landfills is the highest (i.e. \$125 per tonne) while the rate at public fill reception facilities is the lowest (i.e. \$27 per tonne) aiming to alleviate the burden of landfill void space and encourage recycling by providing financial incentives to encourage construction waste producers to sort and recycle construction waste at public fill instead of disposing unsorted construction waste at landfill. The landfilled construction waste decreased from 6,500 tonne per day in 2005 to 4,100 tonne per day in 2006 (EPD, 2007). It proves that mandates are effective policy tool to have immediate effect.

With this successful experience, the Government started to think of possibility of legislating charging of disposal of MSW to reduce landfilling of MSW. However, MSW charging covers each individual over the society rather than a small portion of stakeholders, i.e. the construction industry, as construction waste disposal charging scheme. It requires supports from other policy, e.g. recycling policy, and building up capacity over the society on people awareness of waste recycling and hardware recycling facilities such that people can opt to recycle the

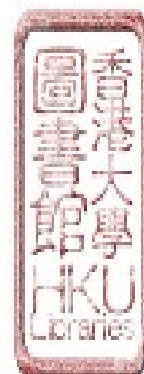


waste instead of lumping waste for landfilling. This require a long term planning on these comprehensive planning. Thus, not until 2014, the Government introduce a pilot MSW charging scheme in some seven estates as a trial run.

To enhance circular economy and enhance waste recycling to reduce landfill burden, Government has implemented Product Eco-Responsibility Ordinance (Cap. 603) to set up a legal framework for producer responsibility schemes (PRSs) for various products in 2008. Environmental levy on plastic shopping bags was then introduced in 2009 as the first PRSs under Cap. 603. Under the scheme, 50 cents are charged to each plastic shopping bag in registered retailer. The distribution of plastic shopping bags by the registered retailers has reduced by 90% after one year of implementation (HKSAR Government, 2010). The successful experience encourages the Government to extend the PRS to other products and the legislation of PRS on waste electrical and electronic equipment (WEEE) and glass beverage bottles are currently under preparation.

Inducements

Inducements are provision of financial incentives to obtain productions of goods and services in return (Elmore, 1987). It is commonly adopted by the Government to provide funding to the trade and community in order to incentivize

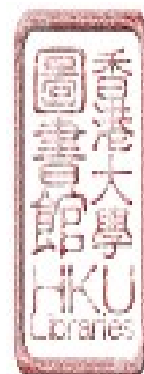


the non-governmental or private sector to provide waste recycling and reduction service. The Government provides low land cost with established site formation and utilities for private sector to set up recycling plants at Eco Park in Tuen Mun. Thus they have successfully attracted 14 tenants currently to provide recycling services, e.g. cooking oil, metal, wood, plastic, batteries, etc., with a low start-up cost.

Besides, the Environment and Conservation Fund (ECF) offer financial incentives to interested parties to conduct environment-related project, including community waste reduction projects, environmental education programme, source separation of waste, food waste recycling and on-site meal portioning projects in school, etc. Education aims to raise people's conscious and change their behavior to reduce and recycle waste which requires long time to take effect. The accumulated impact of each individual funded project on the society at large is hard to measure and guarantee. ECF is a good initiative to mobilize society resource by Government funding; it can only act as an ancillary tool in solid waste context.

Capacity Building

Capacity building is the investment resources for future benefits in terms of human resources, materials and intellectual (Elmore, 1987), instead of short term



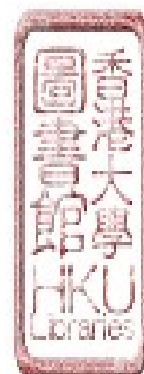
result. In this sense, landfill extensions is one of the capacity building tools in terms of material so as to extend physical capacity of landfills to cope with shortage of landfill void space directly. However, it is not the sole instrument. The Sludge Treatment Facility under construction proposed IWMF (i.e. incinerator), Organic Waste Treatment Facilities, WEEE Treatment and Recycling Facilities are other material capacity building tools that Government planned to adopt.

Figure 2: Sludge Treatment Facility under construction



Source: photo taken by Matthew Wong

More importantly, building capacity for human resources and intellectual are also important in terms of handling solid waste. In this regard, Government introduced a territory-wide source separation of domestic waste programme in 2005 to encourage more people to recycle at households. It set up 3-colour waste

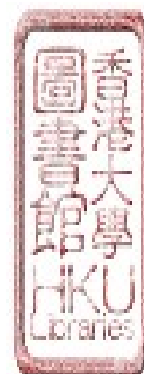


separation bins for metal, plastic and paper at housing estates or buildings and the programme covers over 80% of residential buildings. Together with various publicity and public education, e.g. television advertisements, it also builds up capacity in people's intellectual behavior of waste separation.

More recently, the Food Wise Hong Kong Campaign launched in 2012 to build up community human resources and intellectual capacity on food waste reduction, donation, separation and recycle to the community and catering industry. For example, the Campaign recruits Food Wise Hong Kong Ambassadors in schools and community to promote food waste reduction and engages industry to sign Food Wise Charter to commit in food waste reduction. It also provides code of practice for different sectors to reduce wastage during cooking.

System changing

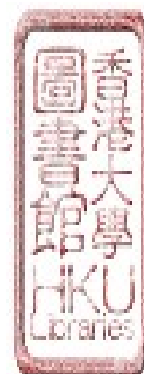
System changing is the transfer of authority among individuals and agencies which involve change in institutional structure which alter delivery of services and goods (Elmore, 1987). Presently, the landfilling is the end-of-pipe treatment of municipal solid waste. The Government has planned to apply incineration, organic waste recycling, WEEE recycling to supplement landfilling since it is land-consuming. In particular, the incinerator can treat 3,000 tonne per day



MSW and reduce its volume by 90% which can extend the lifespan of landfills and generation electricity which can export to grid for domestic use. The modern incineration technology is widely used around the world and the proposed incinerator will meet the most stringent international emission standard to ensure it will not pose health risk to local residents. Thus, the Government tied the landfill extension proposal with incinerator for funding approval by LegCo in 2014, to provide Hong Kong an incremental change in waste management end-of-pipe system as one of the political strategy to put forward the more controversial landfill extension proposals.

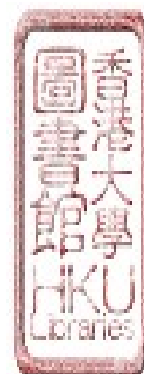
Policy tools analysis and Government agenda setting

It is observed that different types of policy tools have different policy impacts in different time frames. Each of the four policy tools cannot be self-sustained and, in turn, they are mutually supplemented. The mandates policy tools, such as legislation of construction waste charging and PRS scheme, can give immediately effect on dragging down the disposal rate of that particular waste type as its compliance cost is comparatively low. The affected stakeholders are mainly the construction trade for the construction waste charging scheme and the registered retailers for the PRS on plastic shopping bags. Meanwhile, the proposed MSW



charging scheme require a very high enforcement cost to ensure a good compliance as the coverage of scheme is millions of households. In addition, the Government shall provide adequate supporting measures to the stakeholders to recycle the waste instead of susceptible to be charged.

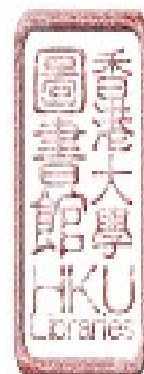
After the “policy framework for the management of municipal solid waste (2005-2014)” issued in 2005, the Government has escalated her effort in public education and create recycling initiatives by “inducements” and “capacity building” tools, including implementation of source separation of waste programme in domestic and commercial & industrial premise; providing land at very low cost in Eco Park for private recyclers to set up recycling business; directly fund non-Government organization by Environment and Conservation Fund, e.g. Yan Oi Tong and St James Settlement, to run plastic and waste electrical and electronic equipment recycling facilities; implement mandatory PRS on plastic shopping bags, voluntary PRS on computer, rechargeable batteries, and fluorescent lamp; Food Wise Hong Kong Campaign, etc. These measures aim at building up Hong Kong capacity to recycle different kinds of waste and reduce waste generation by Government, public and private sectors. However, most of the above measures need long time to take effect and the results are usually unpredictable because the resource recipients vary in their capacity and produce



results in their own objectives which might differ from policy objectives. Thus, both mandate and inducement tools can only supplement to the landfill extension solution in managing imminent solid waste crisis.

The problem stream analysis in Chapter Four illustrated that the Government defined the solid waste problem as the saturation of landfill void space in the coming few years which leads to two possible solutions, i.e. massive reduction of solid waste disposed of at landfills or increase landfill void space in a limited timeframe. To this end, landfill extension is the only viable solutions that can solve the problem directly. Hong Kong has successful experience in landfilling. It is a promising technology and need not require much time for extra feasibility investigation. Extension adjacent to existing landfills also shortens the construction time which can alleviate the problem in time.

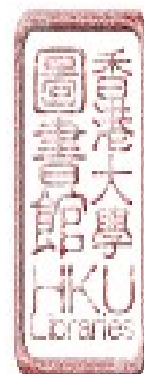
In addition to landfill extension, the Government has considered “system changing” tool to deal with the problem by increasing the solid waste management capacity with modern incineration technology. Over 1,100 km² land area, Hong Kong has population over seven millions which have one of the highest population densities in the world. Land is a scarce resource in this tiny little place. Relying only on land intensive landfilling as MSW disposal ground



is not sustainable. On the other hand, incinerator can greatly reduce the waste volume by 90% by combustion. Modern incinerator is a proven technology worldwide as environmental-friendly, effective and converting waste-to-energy. However, its treatment capacity is only 3,000 tonne per day which is inadequate to treat the total 13,000 tonne MSW landfilled each day (EPD, 2014). Also, the proposed incinerator will be located at a reclamation artificial island near Shek Kwu Chau which needs a long construction period and cannot solve the imminent shortage of landfill space. Considering the MSW disposal capacity in the short and long run, the Government proposed incinerator together with 3 landfill extensions as “3+1” proposal to LegCo for funding approval in 2014. This “3+1” proposal is one of the key to open the policy window in 2014 attempting to seek approval from the EA Panel and PWSC of LegCo.

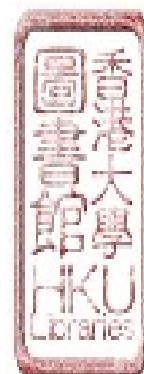
Concluding Comments

Over the years, the administration has or planned to put forward various policy to help solving MSW problem, e.g. construction waste charging scheme, MSW charging scheme, Producers Responsibility Schemes, Eco Park, Environment and Conservation Fund, Sludge Treatment Facility, Organic Waste Treatment Facilities, WEEE Treatment and Recycling Facility, education and publicity programme,

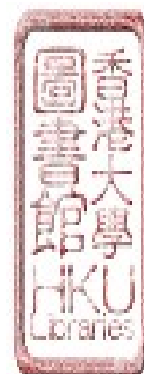


source separation of domestic waste programme, Food Wise Hong Kong Campaign, IWMF, Landfill Extensions, etc. Landfill Extensions and IWMF survived in the “policy primeval soup” not only because of its technical feasibility and value acceptability, the intrinsic characteristics of each of the policies could be classified into four categories, i.e. mandate, inducement, capacity building and system changing. While mandate and inducements require high compliance cost and take long time to take effect correspondingly, combination capacity building and system changing of landfill extension and IWMF (“3+1 proposal”) provide a reliable and sustainable solution to MSW problem. Elmore’s (1987) classification could largely supplement the policy primeval soup in policy stream to exhibit a firm argument on the formation of Government proposal of “3 landfills plus 1 incinerator”.

The policy stream of agenda setting framework explain the favorable political criteria, such as change in administration, community mood, election, organized political force, of a right opportunity for political window in macroscopic view. However, it could not explain how the Government deals with political parties to gain support for its policy proposal in microscopic dynamic. May’s (2005) political feasibility framework provided an effective tool to map out the political landscape and political system in Hong Kong, e.g. the relationship between



executive, LegCo, district council and its voting mechanism and how this political ecology is distorted. At the time of first landfill extension submission in 2013, the rise of local opposition distorted the existing LegCo and district council relationship, even within the same political camp, e.g. DAB, such that the legislators were pressed by district councilors to veto the landfill extension proposals in 2013. To rally support in the next legislative session, the Government's strategy to foster support by publicizing its effort of reducing nuisance local resident near landfills, increasing support to waste recycling by injection of \$1 billion to the Recycle Fund. Thus, the policy window opened in 2014 that the "3 landfill extensions + 1 incinerator" proposals were supported by PWSC.

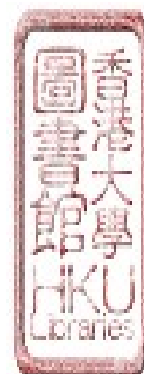


CHAPTER SIX: CONCLUSION AND LESSONS LEARNT

Introduction

The project adopts Kingdon's (1995) agenda setting theory as the basis of the analytical framework to discuss the landfill extension developments in Hong Kong when the unique political environment is so unique, as well as May's (2005) political feasibility analysis as a complement to Kingdon's theory on political stream. While Kingdon's theory is a useful tool in explaining the current political situation in Hong Kong, it is not a theory perfect theory that can fully explain the landfill extension problem in Hong Kong. As mentioned in the above, May's theory can be used as a supplement to Kingdon's theory when analyzing the landfill extension problem in Hong Kong, which is complicated by the current political environment. In addition, Elmore's (1987) classification largely supplements the policy primeval soup in policy stream to exhibit a firm argument on the formation of Government proposal of "3 landfills plus 1 incinerator".

In this concluding chapter, key lessons from the analysis are highlighted. In this regard, there are also possible overseas lessons that Hong Kong may make reference to in dealing with the landfill extension problem, especially when facing

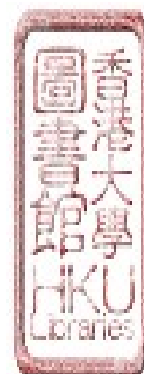


severe resistance from the public. Last but not the least, the significance and limitations of Kingdon's analytical framework are addressed in the light of the Hong Kong experience on the landfill extension proposal.

The Key Lessons Learnt

In this project, Kingdon's (1995) agenda-setting theory has been valuable in examining the suitable time and proper means to push the landfill extension proposal forward and consider if other alternatives should be adopted to complement landfills under the widespread discontent in the society and challenging political environment. MSW is a problem that every government has to deal with. With the increasing awareness of the citizens on environmental protection and local interest, it is ever more difficult for a government to adopt a solid waste management policy that would result in pollution or nuisance to local area. The failure of the government to push forward the landfill extension proposal, a long existing method to deal with MSW, reflects such change of political circumstance in the society. Kingdon's theory assists the analysis of this situation by considering various factors in problem, policy and political streams that led to the non-opening of the policy window in 2013.

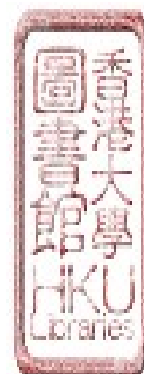
To push forward the landfill extension proposal, the Government has to provide a



total and all-rounded solution to the citizens, that social waste management is environmentally sustainable and minimizing nuisance in long term so that the citizens would be willing to accept short term undesirable consequence caused by the Landfill extension proposal. Elmore's (1987) policy tool model assists in demonstrating that capacity building and system change would be more effective in the long run to deal with the MSW problem.

Also, apart from formulating comprehensive measures on solid waste management, the Government also needs to pay attention to the political ecology and gain sufficient support and reduce assistance from the politicians at legislative stage. May's (2005) political feasibility analysis provides strategies for such purpose.

Putting into consideration the package of policy tools and the policy mappings of political support, the government could be more effectively in push forward landfill extension as part of a total solution to MSW and sustain enough support in the LegCo even though local resistance persists. This helps to explain why the policy window has opened in 2014 and possibility in the near future. This finding has an implication for the Government as an actor in push forward policy proposals in agenda setting process when there are favorable conditions. It is



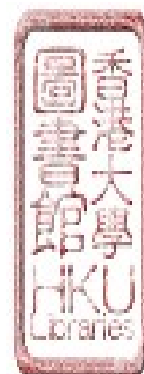
also worth looking at the successful examples in some other locations in managing MSW.

Possible Lessons From Macau and Singapore

Macau

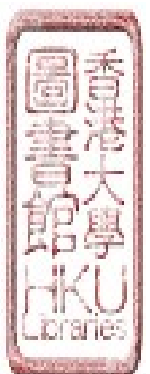
As a densely populated city with limited land resources, since 1992, Macau has mainly relied on incinerator with landfill as supplement to solve the MSW problem. In the foreseeable future, the Government of Macau SAR will continue to take this approach to deal with overwhelming MSW. At the meantime, Macau is also facing the problem of insufficient capacity to tackle with the increasing amount of solid waste. The Government of Macau SAR has intended to make use of food waste recycling and three colors of recycling bins to lighten the burden of incinerator. Furthermore, it has disclosed that construction waste and ashes produced by incinerator would be converted to bricks so as to solve the problem of insufficient landfill capacity.

As a long term solution for Macau, the Government of Macau SAR has proposed transporting construction waste to the Mainland but this is subject to Central Government's approval so the so-call solution is still in doubt. In order to



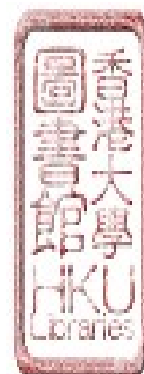
essentially solve the problem, Macau has decided to make reference to Germany's municipal waste management strategy. Germany's success contributes to its introduction of producer responsibility scheme guided by packaging waste regulation. Under this scheme, producers of some particular products such as packaging and batteries are responsible for the products when they ultimately become waste. In respect of household waste, the Germany Government has formulated Recycling Management and Waste Act to delegate authority to local disposal waste authority.

It is suggested that the HKSAR Government may also consider the aforesaid proposals, in particularly, to formulate acts to delegate authority to district council to deal with their own waste in the area. Last but not least; it is observed that in Macau the landfill is located near the airport while the incinerator is situated in industrial region. The distant location from residential area can reduce the opposition of local residents who have the mindset of "locally unwanted land uses (LULU)" and "not in my backyard (NIMBY)". The Government should beware of this factor and duly handle the matter when it promotes its proposal of three landfills plus IWMF.

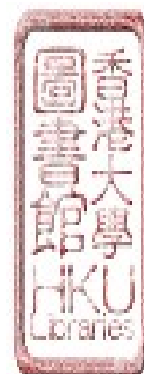


Singapore

Very similar to Hong Kong, Singapore is a highly urbanized and industrialized small island nation with a land area of 715 km² and a population of 5.4 million in June 2013. To curtail the rapid growth of disposed wastes, Singapore's National Environment Agency (NEA) came up with an ambitious solution – to build the world's first offshore landfill site – the Semakau landfill (Waste Management World). The Semakau Landfill was created by reclaiming land between two small islands, where used to be home to small fishing villages before the development of Singapore, located 8km off the coast of south Singapore. The Semakau Landfill has been in operation since 1 April 1999 and underscored Singapore's commitment to strike a balance between urban and economic development and conservation of natural environment (Waste Management World, 2009). With a capacity of 63 million cubic meters, the Semakau Landfill was expected to meet Singapore's need for landfill space beyond the year 2045 (NEA, 2014). Starting from July 2005 up to March 2014, Semakau landfill was opened to members of the public for many kinds of recreational activities and educational tours, however, the educational tours are now temporarily suspended due to the commencement of Phase II construction of Semakau Landfill.



In fact there is nothing new in renovating landfills for public use. The Fresh Kills landfill on Staten Island in New York was closed in 2001 and will be turned into a park in 2035 for New Yorkers. The Kansai International Airport, operated since 1994 and located in the southwest of Osaka, Japan, is the first ocean airport in the world based on an old landfill. None of the above can be compared with the Semakau Landfill, which is the only active landfill in the world that receives incinerated and industrial waste while supporting a thriving ecosystem, including more than 700 types of plants and animals and several endangered species (Deccan Herald). With prudent but high-technology and engineering solutions, the Semakau Landfill was constructed to contain all kind of wastes within the landfill area without polluting the surrounding marine area. The perimeter bund, lined with impermeable membrane, marine clay and rock layers, keeps the surrounding waters pollution-free and ensures that leachate is contained within the landfill area (World Waste Management, 2009). Any leachate generated within the site is treated in a dedicated leachate treatment plant. The NEA has been ensuring that the landfill is clean, free of odors and aesthetically scenic so as to protect the marine ecosystem on and around the Semakau landfill (World Waste Management, 2009).

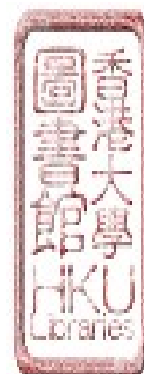


The HKSAR Government may consider a similar proposal to add the recreational and educational elements into the proposal of extension of landfill plus IWMF. Such elements may offset some, if not all, the negative effects brought by the extension of landfill to the neighborhood. In addition, in doing so, if the HKSAR Government is willing to dedicate into odors control and the prevention of the water pollution in or near the landfill, though very costly, the proposal may gain support from the environmental protection groups as well.

Limitations of Kingdon's Theory

Kingdon's (2005) theory provides a useful and applicable analytical framework to fully assess the proposal of landfill extension in Hong Kong. In view of the messy the political environment in Hong Kong since the hand-over in 1997, the failing attempt to introduce an executive-led government which was further complicated by subsequent the Principal Official Accountability System, and the rise of pressure groups and civil society as well as political actors advocating various interests and ideas; all of the above are considered a match with the basis of Kingdon's theory, which found its genesis in Cohen et al's (1972) concept of "organized anarchy" and built upon an image of messy politics (Cairney, 2012).

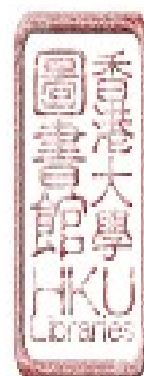
Having said that, there are still a number of discrepancies between Kingdon's



theory and the findings in the project. First of all, unlike the model in the United States which Kingdon's theory was built on, Hong Kong does not have a ruling party system. Most of the political parties in Hong Kong are relatively weak in terms of powers in policymaking and the Chief Executive and Principal Officials, who possess actual powers in policymaking, act on their own individual capacity instead of members of a political party. In this connection, the political and institutional environment of Hong Kong should not be as conducive to the generation of policy entrepreneurs as in the United States.

When using Kingdon's theory to explain the agenda setting process, one key issue needed to be decided is whether a policy window has opened or not. In such a situation, it is necessary to define the meaning of a policy window is open or not open in reality. In Kingdon's work, he does not provide a clear definition. It refers to situation when policy entrepreneurs successfully push a policy proposal to the top of the agenda of policy maker, and assumes that when this has been done, the policy proposal will eventually push forward by the Government.

In reality, when a policy proposal is at the top of agenda, it still needs to go through political process and power struggle in the decision making stage. If the policy proposal at the top of agenda is rejected at that stage, it is unclear

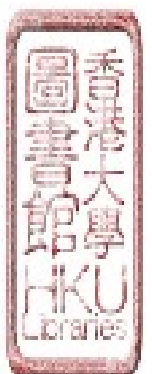


whether a policy window has opened or not in Kingdon' model.

In reality, there are three possibilities:

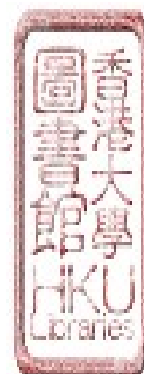
- A policy is pushed to the top of the agenda and passed by the legislature.
- A policy is pushed to the top of the agenda and rejected by the legislature.
- A policy fails to be pushed to the top of the agenda.

In the first of these, it is valid that a policy window is opened, and in the last one it is valid that a policy window is not opened. In the second one, it is unclear whether a policy window has opened or not, because it could be either explained that the policy window is opened, but the policy entrepreneur does not grasp the opportunity, or that the three streams do not come together and the policy window is not opened. Both situations could be used to explain the case and it is largely subject to a choice of description. The unclear definition of a policy window has limited the explanatory power of Kingdon's theory.



REFERENCES

- 2012 Legislative Council Election (2012). *Electoral Boundary Maps: 2012*
Retrieved from: http://www.elections.gov.hk/legco2012/eng/2012_list.html
- ACE Paper 2/2006 (2006). *Recommendations on the Implementation of the Key Initiatives in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)"*, Advisory Council on the Environment. Retrieved from http://www.epd.gov.hk/epd/english/boards/advisory_council/files/ACE_Paper_2-2_006.pdf
- Audit Commission (2008). *Report on Management of Municipal Solid Waste*, 23 October
- Bovens, M. (2008). *Two concepts of accountability*, paper presented at the "Connex" workshop on Accountability, European University Institute, Florence, 21th April
- Cairney, P. (2012) *Understanding Public Policy: Theories and Issues*. UK: Palgrave Macmillan
- Cheng, B. and Lin, J. (2010) the Tseung Kwan O Controversy. *Hong Kong Law Journal*, vol. 40 Part 3, p. 537-547
- Cheung, P.L. (2004). *Facing 2007: Next Step to Constitutional Reform? Strengthen Representativeness; Ensure Effective Governance (In Chinese)*. Synergynet. P.2. Retrieved from: http://www.synergynet.org.hk/pdf/20080124422_b5.pdf
- Deccan Herald (2014), *Singapore's landfill, a nature preserve now*
- District Council (2013, August), *Provision of Services for Odour Study in Tseung Kwan O Area Final Report for Sai Kung District Council*
- Elmore Richard F. (1987). *Instruments and Strategy in Public Policy*, Policy Studies Review, Volume 7, Issue 1, pages 174-186
- Environmental Protection Department (2001), *Notes of View-sharing Meeting held on 2 March 2001: Future Landfill Development in Hong Kong*. Retrieved from



http://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/waste/prob_solutions/files/note.pdf Accessed on 11 August 2014

Environmental Protection Department (2001), *Future Landfill Development in Hong Kong – View-sharing Meeting on 2 March 2001*, retrieved from http://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/waste/prob_solutions/files/view_sharing_020301.pdf Accessed on 11 August 2014

Environmental Protection Department (2005), *A Policy Framework for the Management of Municipal Solid Waste (2005-2014)*. Retrieved from <http://www.epd.gov.hk/epd/msw/> Accessed on 11 August 2014.

Environmental Protection Department (2005), Policy and Consultation Papers. Retrieved from http://www.epd.gov.hk/epd/english/resources_pub/publications/wp_env.html Accessed on 11 August 2014.

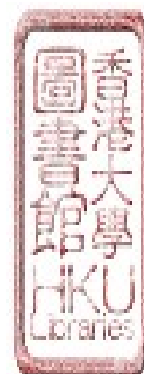
Environmental Protection Department (2007), *Monitoring of Solid Waste in Hong Kong - Waste Statistics for 2006*. Retrieved from <https://www.wastereduction.gov.hk/en/materials/info/msw2006.pdf> Accessed on 11 August 2014

Environmental Protection Department (2007, March 14), *Environmental Impact Assessment Report Executive Summary*. Retrieved from [http://www.epd.gov.hk/eia/register/report/eiareport/eia_1692009/ES/English/pdf/ES_TOC%20\(eng\).pdf](http://www.epd.gov.hk/eia/register/report/eiareport/eia_1692009/ES/English/pdf/ES_TOC%20(eng).pdf) Accessed on 11 August 2014

Environmental Protection Department (2011, March 28), *Future Landfill Development in Hong Kong, Background*, Retrieved from http://www.epd.gov.hk/epd/english/environmentinhk/waste/prob_solutions/landfill_intro.html Accessed on 11 August 2014

Environmental Protection Department (2014), *Monitoring of Solid Waste in Hong Kong - Waste Statistics for 2012*. Retrieved from <https://www.wastereduction.gov.hk/en/materials/info/msw2012.pdf> Accessed on 11 August 2014

Environmental Protection Department (2014, March 30), *Project Background*. Retrieved from <http://www.epd.gov.hk/epd/english/sentlandfillext/project.html>



Accessed on 11 August 2014

Environmental Protection Department (n.d.), *An Open Letter to Tseung Kwai O Residents*. Retrieved from:

<http://www.enb.gov.hk/sites/default/files/en/node12/landfill.pdf>

Environment Bureau (2013), *Hong Kong Blueprint for Sustainable Use of Resources 2013-2022*. Retrieved from

<http://www.enb.gov.hk/en/files/WastePlan-E.pdf>

Environment Bureau (2007), *Press Release 2011*. Retrieved from

http://www.enb.gov.hk/tc/news_events/press_releases/press_year2011.html

Executive Council (2014). *Membership of Executive Council: 2014*. Retrieved from: <http://www.ceo.gov.hk/exco/eng/membership.html>

Exmoo (2011), *Overloaded Incinerator, full landfill, and 300 tons of kitchen waste per day (In Chinese)*. Retrieved from

<http://www.exmoo.com/index.php?m=content&c=index&a=show&catid=9&id=9952>

Exmoo (2011), *To Our Eventually Saturated Landfills (In Chinese)*, Retrieved from

<http://www.exmoo.com/index.php?m=content&c=index&a=show&catid=17&id=23100>

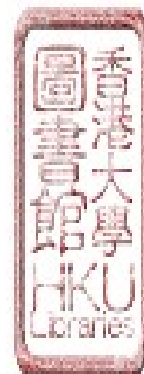
European Environment Agency (2013), *Report on Municipal Waste Management in Germany*, February 2013

HKGBC (2014) Retrieved from <https://www.hkgbc.org.hk/eng/kswong.aspx>
Accessed on 12 August 2014.

HKSAR Government (2010, July 4), *Press Releases - First anniversary of plastic bag levy sees encouraging results*, Retrieved from

<http://www.info.gov.hk/gia/general/201007/04/P201007020231.htm>

HKSAR Government Press Releases (2010, October 6), *Government proposes to defer commencement date of Country Parks (Designation) (Consolidation)*



(Amendment) Order 2010. Retrieved from
<http://www.info.gov.hk/gia/general/201010/06/P201010060298.htm> Assessed on
 14 August 2014.

HKSAR Government (2012), *Basic Law. Article 74 and Annex II*

HKSAR Government (2012, March 25), *Press Releases – Chief Executive election result*, Retrieved from
<http://www.info.gov.hk/gia/general/201203/25/P201203250290.htm>

HKSAR Government (2012), *Chief Executive Election Ordinance 2012*, Chapter 569 Section 31

HKSAR Government (2013, June 26), *Press Releases – LCQ18: Extension of landfill*, Retrieved from
<http://www.info.gov.hk/gia/general/201306/26/P201306260311.htm>

House News (2013, July 12), *Tuen Mun Residents on hunger strike, BPA Discuss on vote (in Chinese)*

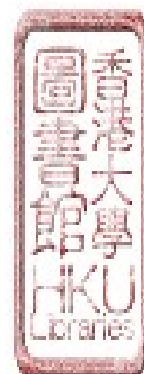
Leung Hon Wai v. Director of Environmental Protection and another [2013] HCAL49/2012 (Hong Kong)

Legislative Council of Hong Kong. (n.d.). In *Wikipedia*. Retrieved 28 July 2014 from: http://en.wikipedia.org/wiki/Legislative_Council_of_Hong_Kong

Legislative Council Paper No. CB(1) 386/05-06(04) (2005), *A Policy Framework for the Management of Municipal Solid Waste in Hong Kong*, Panel on Environmental Affairs. Retrieved from
<http://www.legco.gov.hk/yr05-06/english/panels/ea/papers/ea1215cb1-486-4-e.pdf>

Legislative Council Paper No. CB(1)1079/12-13(02) (2013), *Background brief on “Extension of landfills”* prepared by the Legislative Council Secretariat. Retrieved from
<http://www.legco.gov.hk/yr12-13/english/panels/ea/papers/ea0527cb1-1079-2-e.pdf>

Legislative Council Paper No. CB(1)951/13-14(03) (2014), *Panel on*



Environmental Affairs , Meeting on 24 February 2014. Retrieved from
<http://www.legco.gov.hk/yr13-14/english/panels/ea/papers/ea0224cb1-951-3-e.pdf>

Legislative Council (2014), Finance Committee (Results) 11 July 2014. Retrieved from <http://www.legco.gov.hk/yr13-14/chinese/fc/fc/results/fc20140711.htm>
 Accessed on 14 August 2014

Kingdon, J. W. (1995), *Agenda, Alternatives and Public Policies*. New York: HarperCollins College Publishers, 2nd ed.

MyGovHK(2012) Retrieved from.
<http://www.gov.hk/en/about/govdirectory/po/sen.htm> Accessed on 12 August 2014.

Macau New Technologies Incubator Centre (2008), *Waste Evolution and Way Forward in Macau (In Chinese)*, Retrieved from
http://www.manetic.org/index.php?option=com_content&task=view&id=370&=&Itemid=0&lang=en Accessed on 14 August 2014

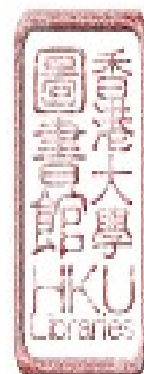
Metro Hong Kong (2014, April 14), *Waste Reduction and Infrastructure in parallel & “3+1” proposal must go on (In Chinese)*

National Environment Agency (n.d.), Retrieved from
<http://app2.nea.gov.sg/energy-waste/waste-management/semakau-landfill>
 Accessed on 14 August 2014

National Environment Agency (n.d.), *Semakau Landfill & TUAS Marine Transfer Station* [Brochure]. Retrieved from
<http://www.nea.gov.sg/cms/esd/brochure/TMTS.pdf>

NEWS.gov.hk. (2014a). *"Go Green, Waste Less" Summit mobilises community to reduce waste, 11 Apr*. Retrieved from:
<http://www.info.gov.hk/gia/general/201404/11/P201404110400.htm>

NEWS.gov.hk. (2014b). *Transcript of remarks by SEN, 29 March*. Retrieved from: <http://www.info.gov.hk/gia/general/201403/29/P201403290581.htm>



Policy Address (2013), paragraph 141 of 2013 Policy Address: Waste Management: Resource Sustainability. Retrieved from <http://www.policyaddress.gov.hk/2013/eng/p141.html>

Public Opinion Programme (2013), *Government Appraisal (half-yearly average)* (7-12/1998 – 7-12/2013), Retrieved from http://hkupop.hku.hk/chinese/features/PSI/chart_halfyr/ga_chart.html
Accessed on 14 August 2014

Rocheffort, D. A. and Cobb, R. W. (1993). Problem Definition, Agenda Access, and Policy Choice. *Policy Studies Journal* Vol. 21 No. 1 1993 (56 – 71)

Sai Kung District Council. (n.d.). In *Wikipedia*. Retrieved 28 July 2014 from: http://en.wikipedia.org/wiki/Sai_Kung_District_Council

South China Morning Post (2013, June 1), *Hundreds expected to descend upon Legco*.

South China Morning Post (2013a, July 8), *Lau Wong-fat vows to block second landfill extension, in Tuen Mun*.

South China Morning Post (2013b, June 22), *Sweeteners offered to win support for landfill expansions*.

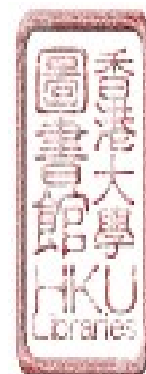
South China Morning Post (2013c, July 12), *Lam's landfill plea falls on deaf ears*.

South China Morning Post (2014, January 16), *HK\$1 billion each for funds to boost recycling and reuse of old landfill sites*.

South China Morning Post (2014a, January 20), *Tuen Mun councilors dismiss Wong Kam-sing's landfill-plan sweeteners*.

South China Morning Post (2014b, February 20), *Incinerator and landfill expansions are a must, says Benard Chan*.

South China Morning Post (2014c, March 28), *Landfill, incinerator plans pass Legco's environmental affairs panel*.



South China Morning Post (2014d, April 16), *Lawmakers split over controversial HK\$20b waste landfill and incinerator plans.*

South China Morning Post (2014e, May 7), *Decision on Hong Kong's 'last resort' landfill, incinerator plans put on hold again.*

South China Morning Post (2014f, May 21), *Lawmakers finally vote to back HK\$2b Tseung Kwan O landfill extension.*

South China Morning Post (2014g, June 27), *Chaos as initial funding for new towns in New Territories approved by Legco panel.*

South China Morning Post (2014k, July 13). *Hospital funded in final seconds.*

Sky Post (2013, June 25), *TKO Residents on hunger strike to protest against the extension of landfill (In Chinese).* Retrieved from <http://lifestyle.etnet.com.hk/column/index.php/features/news/18392>

Sustainable Development Unit (2004), *A First Sustainable Development Strategy for Hong Kong.* Retrieved from <http://www.susdev.org.hk/susdevorg/archive2004/en/pdf/1stSDStrategyE.pdf>
Accessed 11 August 2014 Accessed 14 August 2014

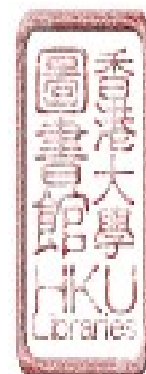
The Singapore Department of Statistics (n.d.). *Latest Data.* Retrieved from http://www.singstat.gov.sg/statistics/latest_data.html#14 Accessed on 14 August 2014

The Standard (2013, June 26), *TKO landfill plan likely dumped*

The Sun (2011, July 18), *Increase in non-woven bags was attributed by plastic shopping bags levy scheme (in Chinese).* Retrieved from http://the-sun.on.cc/cnt/news/20110718/00407_020.html Accessed 14 August 2014

Lau, S T W (2013), *A question of Waste, The Journal of the Hong Kong Institution of Engineers* Vol. 41 Nov 2013

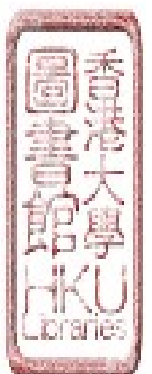
Scott, Ian (2010), *The Public Sector in Hong Kong*



Voter Registration. (2014), Voter Registration Statistics: Functional Constituency: 2014. Retrieved from: <http://www.voterregistration.gov.hk/eng/statistic20143.html>

Waste Management World (2009, March), *Semakau Landfill.* Retrieved from: <http://www.waste-management-world.com/articles/2009/03/semakau-landfill.html>
Accessed on 14 August 2014

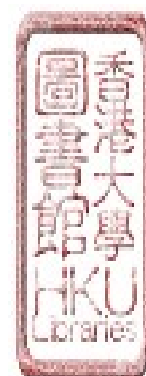
Waste Management World (n.d.), *Integrated Thinking: Solid Waste Management in Singapore.* Retrieved from: <http://www.waste-management-world.com/articles/print/volume-8/issue-1/features/integrated-thinking-solid-waste-management-in-singapore.html> Accessed on 14 August 2014



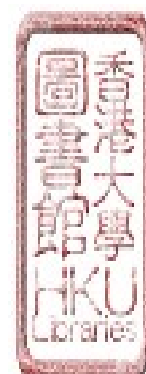
APPENDIX I

A Chronology of Milestones

Date	Event
1989	Publication of a White Paper “Pollution in Hong Kong – A Time to Act”
1990	Called off of an urban incinerators system at Lai Chi Kok.
1993	Stop operating the Kennedy Town incinerator
19 November 1993	WEST landfill starting to operate
1994	Mui Wo incinerator closed down
26 September 1994	SENT landfill commenced
1 June 1995	Kick off of operating the NENT landfill
1996	Pillar Point Valley landfill closed down
May 1997	Kwai Chung incinerator plant closed down
January 2003	“Extension for Existing Landfills and Identification of Potential New Waste Disposal Sites” has been published.
December 2005	EPD published “A Policy Framework for the MSW” to set out the strategy for manage the solid waste until 2014.
1 July 2007	Stepped down of Ms Sarah Liao and her successor Mr Edward Yau was appointed as Secretary for the Environment
20 September 2007	EIA report with conditions of NENT landfill extension was approved
6 May 2008	EIA report of the SENT landfill extension was approved
7 July 2009	Publication of the environmental levy scheme
February 2010	The feasibility study of the extension of SENT and WENT landfill were completed
1 July 2012	Mr KS Wong was appointed as Secretary for the Environment under CY Leung’s Government
12 September 2012	Ms Christine Loh was appointed as undersecretary for the environment.
May 2013	“Hong Kong Blueprint for Sustainable Use of Resources 2013-2022” has been published by EnB

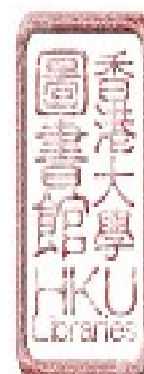


26 June 2013	SKDC member Ms Fong Kwok Shan, Christine staged a hunger strike over thirty five hours together with TKO residents. The proposal of SENT landfill extension proposal has been withdrawn by the Government after then,
2 July 2013	The proposal of the extensions of WENT & NENT landfills were agreed in by the members of PWSC meeting.
11 July 2013	Lobbying and negotiating with different local district councilors by Chief Secretary, Ms Carrie Lam at Tuen Mun DC.
12 July 2013	After the 24 hours hunger strike demonstrated by Tuen Mun residents whom were led by the Tuen Mun District Councilors, a proposal for WENT and NENT landfill extensions was overthrown in FC meeting
9 August 2013	Ms Carrie Lam and KS Wong pay a visit to the villages near by NENT landfill. They were asking for the support from the local stakeholders and residents.
10 November 2013	The Government reiterated that three strategic landfills are the needs for Hong Kong; the new agenda would be submitted to LegCo for discussion in the first quarter of 2014.
15 November 2013	One-off subsidy for retrofitting refuses collection vehicles for meeting new equipment standard by installation of tailgate cover and replacement of broken parts.
22 January 2014	HKSAR Government proposed that the SENT landfill in TKO would handle odourless construction waste only. It has been approved by the LegCo
20 February 2014	EnB issued ” Food Waste & Yard Waste Plan for Hong Kong 2014-2022”
2-8 March 2014	9 LegCo members together with KS Wong paid a visit to Sweden, Denmark, UK and Netherlands to exchange the views with the waste-to-energy plants in Europe.



22 March 2014	the public hearing of proposal of three landfills and one incinerator was held for one and a half day
28 March 2014	The Environmental Affairs Panel of the LegCo recommended discussing the proposal of three landfills and one incinerator at PWSC meeting.
7 April 2014	Established of the pilot scheme of MSW charging
8 April 2014	Organic Waste Treatment Facilities Phase 1 was endorsed by PWSC
16 April 2014	The PWSC of the LegCo deferred the decision on the extension of TKO landfill and the development of IWMF to the next meeting on 7 May 2014 meanwhile the extension in Tuen Mun and Ta Kwu Ling has been endorsed previously on 2 July 2013.
25 April 2014	Tuen Mun District Councilors protested against the dump extension plan in their area and half of them declined to have special meeting with KS Wong and walked out from Tuen Mun council office
7 May 2014	The PWSC of LegCo adjourned the meeting again due to filibustering and demonstrations from audience.
21 May 2014	Lawmakers finally backed funding request for the SENT landfill extension in the meeting of PWSC
27 May 2014	The PWSC approved funding request for construction of incinerator at Shek Kwu Chau.
12 July 2014	SKDC member Ms Christine Fong taken a "bloody shower" "all over her body so as to stop the discussion of landfill extensions in FC meeting.
July 2014	A filibuster" phenomenon during the meeting of FC led to the deferral for discussion of the budget proposal of three strategic landfills. Due to the adjournment of LegCo, the discussion will be continued in October after the summer recess of LegCo

Sources: media, (HKSAR Government, 2012), (LC Papers, 2013/2014), (EPD, 2005)



APPENDIX II

Existing Odour remediation measures implemented in landfills

Figure 1: Mobile deodorizer



Figure 2: Cover for special waste trench

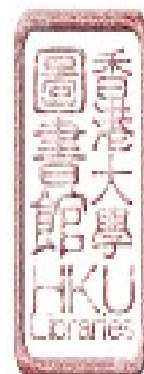


Figure 3: Deodourizer



Figure 4: Landfill daily cover



Sources: photos taken by Matthew Wong

