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The Role of Governments in **Education for Sustainable Consumption**

STRENGTHENING CAPACITY FOR EFFECTIVE IMPLEMENTATION
IN CHINA, JAPAN, AND REPUBLIC OF KOREA



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Institute for
Global Environmental
Strategies



The Role of Governments in
Education for Sustainable Consumption

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IN CHINA, JAPAN, AND REPUBLIC OF KOREA

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The Role of Governments in Education for Sustainable Consumption: Strengthening capacity for effective implementation in China, Japan, and Republic of Korea

IGES Policy Report

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ACRONYMS AND ABBREVIATIONS

3Rs	Reduce, Reuse, Recycle
10YFP	Ten-Year Framework of Programmes (on Sustainable Consumption and Production)
BNU	Beijing Normal University
BOCOG	Beijing Organizing Committee for the Olympic Games
CAA	Consumer Affairs Agency (of CAO, Japan)
CAO	Cabinet Office, Japan
CASBEE	Comprehensive Environmental Evaluation System Architecture
CE	Consumer Education
CEC	China Environmental United Certification Center Co., Ltd.
CEEC	Centre for Environmental Education and Communication (of MEP, P. R. China)
CFC	Chlorofluorocarbon
CGPN	China Green Purchasing Network
CK	Consumers Korea
CNY	Chinese Yuan (currency, also RMB)
CO ₂	Carbon Dioxide
CSD	United Nations Commission on Sustainable Development
CSR	Corporate Social Responsibility
CUK	Consumers Union of Korea
CYCAN	China Youth Climate Action Network
DSD	United Nations Division for Sustainable Development
DESD	United Nations Decade of Education for Sustainable Development (2005-2014)
EE	Environmental Education
EFA	Education for All
EGG	Education for Green Growth
EHS	Environmental Health and Safety
EPA	Environmental Preservation Association, Republic of Korea
ESC	Education for Sustainable Consumption
ESD	Education for Sustainable Development
FSC	Forest Stewardship Council
GC	Green Consumption
GCCS	Green Citizens' Committee Seoul
GDP	Gross Domestic Product
GEI	Global Environmental Institute, P. R. China
GG	Green Growth
GM	Genetically Modified
GMO	Genetically Modified Organism
GPN	Green Purchasing Network
GPN-J	Green Purchasing Network Japan
GPP	Green Public Procurement
GSN	Green Start Network, Republic of Korea
GTZ	German Society for Technical Cooperation
IGES	Institute for Global Environmental Strategies
IGPN	International Green Purchasing Network
ISC	Institute of Sustainable Community, P. R. China
ISO	International Organization for Standardization
ISO 14001	Environmental management systems—Requirements (international standards)
ISO 9000	Quality management systems — Requirements (international standards)
JEA	Japan Environment Association
JEMAI	Japan Environmental Management Association for Industry

JPY	Japanese Yen (currency)
KEITI	Korea Environmental Industry and Technology Institute
KEMCO	Korea Energy Management Corporation
KFTC	Korea Fair Trade Commission
KGPN	Korea Green Purchasing Network
KoEco	Korea Eco-Label
KRW	Korean Won (currency)
LCA	Life Cycle Assessment
LOHAS	Lifestyles of Health and Sustainability
M&E	Monitoring and Evaluation
MEP	Ministry of Environmental Protection, P. R. China
MEST	Ministry of Education, Science and Technology, Republic of Korea
METI	Ministry of Economy, Trade and Industry, Japan
MEXT	Ministry of Education, Culture, Sports, Science and Technology, Japan
MKE	Ministry of Knowledge Economy, Republic of Korea
MOE	Ministry of Environment
MOE	Ministry of Education, P. R. China
MOEJ	Ministry of the Environment, Japan
MOEK	Ministry of Environment, Republic of Korea
NDRC	National Development and Reform Commission, P. R. China
NGO	Non-Governmental Organisation
NPO	Non-Profit Organisation
OECD	Organisation for Economic Co-operation and Development
PCGG	Presidential Commission on Green Growth, Republic of Korea
PCSD	Presidential Commission on Sustainable Development, Republic of Korea
PDCA	Plan, Do, Check, Act
PRA	Participatory Rural/Rapid Appraisal
PRC	People's Republic of China (or P. R. China)
RMB	Chinese Renminbi (currency, also CNY)
ROK	Republic of Korea
RTM	Round Table Meeting
SC	Sustainable Consumption
SCP	Sustainable Consumption and Production
SD	Sustainable Development
SEPA	State Environmental Protection Agency, P. R. China
SL	Sustainable Lifestyles
SMEs	Small and Medium-sized Enterprises
SMG	Seoul Metropolitan Government
SWOT	Strengths, Weaknesses, Opportunities, Threats
TCU	Tokyo City University
TEMM	Tripartite Environment Ministers Meetings, China, Japan and Korea (CJK)
UN	United Nations
UNCED	United Nations Conference on Environment and Development (Rio de Janeiro, 1992)
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UN ECOSOC	United Nations Economic and Social Council
UNEP	United Nations Environment Programme
UN ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
WCED	World Commission on Environment and Development
WG	Working Group
WSSD	World Summit on Sustainable Development (Johannesburg, 2002)

EXECUTIVE SUMMARY

National and sub-national policy for Education for Sustainable Consumption (ESC) is one of the powerful instruments to influence sustainable consumption (SC) behaviour at both individual and organisational levels. This report addresses how to improve the capacity of policy makers and governments in formulating ESC policy. It also addresses the strategies governments can use to influence consumer behaviour.

The report presents three country case studies that look at the current institutional frameworks and governmental capacities for implementing effective ESC from P. R. China, Japan and Republic of Korea. Despite diverse policy dialogues and many initiatives on SCP, there is still a lack of knowledge and experience on how we actually can educate nations and their citizens for sustainable consumption. The main research was conducted through survey and interviews with relevant government officials in P. R. China, Japan and Republic of Korea, and it was supported by additional review of current policy frameworks and strategic plans and assessment of training materials/curriculums. This research was conducted in the respective countries by research partners at Beijing Normal University, Tokyo City University and Consumers Union of Korea in close collaboration with IGES.

The promotion of sustainable consumption and green markets has received attention from many national governments including the P. R. China, Japan and the Republic of Korea. All three countries have demonstrated interest and commitment towards shifting to more sustainable patterns of development and have also recognised the importance of sustainable consumption in achieving this. However, ESC still remains a very young and even novel topic that does not yet have substantial policy mandates to ensure its implementation in these countries, and thus there are many opportunities for capacity building to advance effective implementation.

The findings from this research identify key aspects of current governmental context for promoting SC and consumer awareness raising (including relevant policy frameworks, overall strategies, understandings of government officials, and barriers and obstacles to implementation). The three country cases are then analysed in a comparative capacity assessment. The assessment framework is based on the four levers of change identified by UNDP for assessing capacity assets and needs: 1) institutional arrangements, 2) leadership, 3) knowledge, and 4) accountability.

The main focus of the recommendations is on improving the wider policy and institutional frameworks for ESC implementation and to discuss how ESC can be better linked with wider policies for both sustainable production and consumption (SCP) and education for sustainable development (ESD). The primary recommendations in this work address:

- 1) Expanding roles and responsibilities for ESC beyond national governments;
- 2) Applying multiple policy mechanisms and inter-ministerial/inter-agency approaches;
- 3) Defining policy priorities and target areas for sustainable consumption;
- 4) Addressing ESC as a thematic approach to ESD and SCP;
- 5) Improving accountability as a means to strengthen the overall system, and;
- 6) Advancing ESC in formal education curriculums.

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Hayama, Japan; September 2011

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All of the authors of this work would like to thank the numerous government officials and NGO representatives who cooperated in this research through interviews and the completion of surveys. In total around sixty people provided important inputs into the research process and the production of country case studies from P. R. China, Japan and the Republic of Korea. Though the number of officials is too many to name all directly, your contributions are greatly appreciated.

The authors of this work would also like to express our gratitude to the international the PERL network. PERL is the “Partnership for Education and research about Responsible Living”. PERL has provided significant support for developing an Asian ESC network and also to bring our research to the forefront of the international discussions on ESC. The country case studies and capacity assessment were presented in their preliminary formats at PERL’s international conference where we received valuable feedback from the network’s members.

Thanks are also due to Prof. Hidefumi IMURA and Dr. Mark ELDER for their valuable comments in the final review and editing of this publication.

CHAPTER 1

IMPROVING IMPLEMENTATION OF EDUCATION FOR SUSTAINABLE CONSUMPTION *A capacity assessment approach*

Robert J. DIDHAM¹

I. INTRODUCTION

This report investigates the implementation of Education for Sustainable Consumption (ESC) in China, Japan and the Republic of Korea. The research has specifically focused on the current governmental capacities and institutional frameworks for implementing effective ESC and promoting responsible consumer behaviour. This work aims to identify opportunities to improve the overall strategy and approach taken towards ESC by highlighting the potentials for strengthening implementation capacities. The goal of this process is to improve the wider policy and institutional frameworks for ESC implementation rather than the specific topical coverage of ESC by demonstrating the potential for integration with wider policies for both sustainable production and consumption (SCP) and education for sustainable development (ESD). The report aims to address methods to improve the meta-level structures for ESC implementation instead of focusing on micro-level activities and individual topics for ESC initiatives. In this manner, the focus is on improving quality of implementation rather than quantity of thematic coverage; and once an effective framework exists for conducting ESC then future work can also focus on diversifying the topics it addresses.

The recommendations for strengthening governmental capacity for ESC implementation aim at improving the meta-level structures for generally producing effective ESC initiatives and ensuring positive impacts rather than focusing on the micro-level activities and specific initiatives that can be part of strengthening the topical and subject basis of ESC implementation. This choice was taken due to the recognition that there is a very wide diversity of subjects and topics that can be addressed under an ESC framework and the belief that prior to increasing the quantity of topics covered by ESC it is first necessary to strengthen the quality of how ESC initiatives are implemented.

This research was structured and initiated by the Institute for Global Environmental Strategies (IGES). However, its success owes to the participation of SCP and ESD experts in conducting country case studies on the governmental capacities for ESC implementation in each country. The Chinese country case study was conducted by Dr. Qing TIAN of the Environmental Education Centre at Beijing Normal Education. The country case study for Japan was conducted by Dr. Masahisa SATO and Prof. Hideki NAKAHARA of the Faculty of Environmental & Information Studies at Tokyo City University. Dr. So-Young LEE and Dr. Jung Hwa KANG of the Consumers Union of Korea conducted the country case study for the Republic of Korea.

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These partners carried out a series of interviews with relevant government officers and civil society members in their respective countries. They also utilised surveys, reviews of current policy frameworks and strategic plans, and assessment of training materials and curriculums. The chapters contained in this work presenting the three country case studies each provide a unique look at the way in which the respective governments of these countries are embracing and trying to promote sustainable consumption and responsible consumer behaviour. These studies also help to highlight a number of areas in which the capacities for ESC can be strengthened and better streamlined into existing policy systems.

The country case studies are followed by a comparative capacity assessment between the three countries. The framework for this assessment is based on the UNDP capacity development approach and its four identified levers of change: institutional arrangements, leadership, knowledge, and accountability. This analysis provides insight into the establishment of an effective capacity development strategy for increasing the quality implementation of ESC. Following this analysis, several policy recommendations are provided for improving governmental capacities for ESC and creating better integration with wider policy systems on SCP and ESD. The main recommendations in this work address:

- 1) Expanding Roles and Responsibilities for ESC beyond National Governments;
- 2) Applying Multiple Policy Mechanisms and Inter-Ministerial/Inter-Agency approaches;
- 3) Defining Policy Priorities and Target Areas for Sustainable Consumption;
- 4) Addressing ESC as a thematic approach to ESD and SCP;
- 5) Improving Accountability as a means to strengthen the overall system, and;
- 6) Advancing ESC in Formal Education Curriculums.

II. THE IMPORTANCE OF EDUCATION FOR SUSTAINABLE CONSUMPTION

Education for Sustainable Consumption (ESC) is a concept that has recently received a significant amount of attention as an important process for bolstering the transition towards a *low-carbon, sustainable society*. However, it also affixes a further concept to the plethora of theories and ideas that have been incorporated into the all-inclusive framework of sustainability and/or sustainable development, thus consideration must be given to if ESC adds clarification to or further confounds the overall field of study. Education for Sustainable Consumption proves itself a poignant concept though because of its ability to bridge and incorporate three of the major approaches for sustainability, specifically Sustainable Consumption and Production (SCP), Education for Sustainable Development (ESD), and Sustainable (or responsible) Lifestyles.

ESC has gained recognition during international processes on both SCP and ESD, the UN's Marrakech Process and the UN's Decade of Education for Sustainable Development respectively, for its uniqueness to postulate and invigorate active methods and tools for citizens and consumers to participate in and actively incorporate responsible and sustainable consumption into their daily lifestyles and habits. In this manner, Education for Sustainable Consumption can be understood as having a two-fold objective: the first objective aimed at influencing behaviour is to advance participation in sustainable consumption practices, and the second objective aimed at influencing knowledge and conceptualisation is to provide a tangible entry into the wider 'philosophy' of sustainable development. While SCP and ESD both attempt to address complex subjects, they are

often aimed more at influencing knowledge and conceptualisation than at influencing behaviour, thus they can lack relevance to the average person's daily life. ESC, with its balance tilted more towards practical actions, serves as an appropriate entry point for many people to incorporate sustainable consumption practices into their daily lives and thus to also gain experience of the underpinning principles of sustainable development.

UNESCO explains the importance of ESC in the mid-term report for DESD as:

Education for Sustainable Consumption (ESC), a core theme of Education for Sustainable Development, is essential to train responsible citizens and consumers in this context: individuals need to be aware of their fundamental rights and freedoms, appropriately informed to participate actively in the public debate, oriented towards a conscientious participation in the markets. Hence, ESC has become a core component of ESD and global citizenship and generates awareness of the interrelatedness of central ESD issue (UNESCO, 2009a: 50).

UNEP's publication *Here and Now* (2010), prepared in cooperation with the Marrakech Task Force on Education for Sustainable Consumption (led by Italy) provides important guidelines and recommendations for implementing and mainstreaming ESC into both formal and non-formal education processes. *Here and Now* outlines the following aspirations for ESC:

ESC is therefore about providing citizens with the appropriate information and knowledge on the environmental and social impacts of their daily choices, as well as workable solutions and alternatives. ESC integrates fundamental rights and freedoms including consumers' rights, and aims at empowering citizens for them to participate in the public debate and economy in an informed and ethical way (UNEP, 2010a: 11).

It is also important to acknowledge that the idea of sustainable consumption itself extends beyond a technical definition based on material or life-cycle assessment and further includes social and ethical considerations. The UNDP in its 1998 Human Development Report, *Consumption for Human Development*, identified four main principles of sustainable consumption:

- *Shared* – Ensuring basic needs for all;
- *Strengthening* – Building human capabilities;
- *Socially responsible* – So consumption by a few people does not compromise the wellbeing of others;
- *Sustainable* – Without mortgaging the choices of future generations (UNDP, 1998: 1).

Despite diverse policy dialogues and many numbers of initiatives on SCP, there is still a lack of knowledge and experience on how we actually can educate nations and their citizens for sustainable consumption. Many current policies on SCP lack clear identification of mechanisms and strategies to promote responsible consumer behaviour. ESC is a specific activity that focuses on directly influencing consumer behaviour by encouraging responsible and sustainable consumption. ESC policy faces an impediment though due to the lack of understanding of how policy can directly influence consumer choice and lead to conscientious changes in behaviour.

The promotion of sustainable consumption and green markets has received attention from many national governments including the Northeast Asian countries of P. R. China, Japan and the Republic of Korea. All three countries have demonstrated interest and commitment towards shifting to more sustainable patterns of development and have also recognised the importance of sustainable consumption in achieving this. Evidence will be drawn from country case studies conducted in China, Japan and the Republic of Korea aimed at identifying the key aspects of the current governmental context for promoting sustainable consumption and consumer awareness raising (including relevant

policy frameworks, overall strategies, understandings of government officers, and barriers and obstacles to implementation).

This report provides an assessment of current governmental strategies for promoting sustainable consumption, addresses the current capacity for implementing effective ESC, and provides recommendations for improving ESC policy and implementation. There is a need to develop effective governmental mechanisms to advance sustainable consumption practices; to secure strong ESC leadership from policy-decision makers; and to promote political dialogues that encourage regional cooperation and good practice. This research must begin by identifying the current strengths and weaknesses in existing ESC knowledge held by relevant policy decision-makers. This will occur through a review of current policy frameworks and strategic plans, assessment of training materials/curriculums, and through interviews with relevant officers.

III. SUSTAINABLE CONSUMPTION AND PRODUCTION

The consumption and production patterns of modern societies are recognised as one of the main issues that must be addressed to tackle the current patterns of unsustainable growth and development. Sustainable consumption requires dealing with not only what we consume, but also the ways in which we consume, how much is consumed, and how the wastes from our consumption are dealt with. The Oslo Symposium on Sustainable Consumption held in 1994 defined sustainable consumption as “the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations” (Oslo Roundtable of Sustainable Production and Consumption, 2009).

It was at UN Conference on Environment and Development in Rio de Janeiro in 1992 that the significance of the current patterns of consumption and production and the resulting harm to the global environment these patterns result in were first addressed at the international level. Furthermore, in *Agenda 21* SCP was explained as a topic that could help to link environmental and development challenges (UNEP, 2010b: 12-3). “It is important to understand that ‘sustainable consumption’ does not automatically translate into ‘less consumption’ but rather to more efficient, better informed and less resource intensive consumption” (UNEP, 2005: 3). At the international level, SCP policy gained significant momentum at the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002 when “Changing Unsustainable Patterns of Consumption and Production” was highlighted as one of the five main thematic areas for sustainable development implementation (see Johannesburg Plan of Implementation; UN DESA, 2002).

Prior to WSSD, a majority of the activities and policies on SCP aimed at areas on cleaner production and improving efficiencies in the supply chain. The call for changing unsustainable patterns of consumption and production substantially catalysed both aspects of SCP and brought consumption oriented policies to the forefront of international activities. Following this call, efforts began to be taken under the framework of the Marrakech Process on SCP. Seven task forces were formed as part of the Marrakech Process to investigate important areas of SCP including Education for Sustainable Consumption (led by Italy) and Sustainable Lifestyles (led by Sweden). The Marrakech Process was also working to establish a 10 year framework of programmes (10YFP) on SCP, but unfortunately

when the text was proposed for agreement at the Commission on Sustainable Development 19 meeting in May 2011 it was not able to achieve consensus.

The Marrakech Process was still very successful in strengthening recognition for the importance of ESC as a means for changing behaviour practices of individuals. Several important policy recommendations and education tools came out of this process. ESC is challenged with not only demonstrating good consumption practices but also to promote a sense of individual responsibility for achieving a sustainable society, and sustainable consumption is also challenged with breaking the modern conception that our possessions and our levels of mass consumption are directly equated to our quality of life. The idea of sustainable consumption refers to a new social and cultural paradigm that challenges individuals with, “participating in the ongoing values debate about quality of life; developing critical analysis of information; controlling the human impact on nature; preventing life-style related illnesses; exercising social responsibility; and maintaining public discourse in order to guarantee accountability” (UNEP, 2010a: 8).

IV. EDUCATION FOR SUSTAINABLE DEVELOPMENT

Education for Sustainable Development also has its roots in the UN Conference on Environment and Development and educational objectives for sustainable development were detailed in chapter 36 of *Agenda 21* (1992). Similarly to SCP, ESD was advanced as important social process at the WSSD in 2002 during which the proposal for the UN Decade of Education for Sustainable Development (2005-2014) (DESD) was first made. DESD was initiated with UNESCO as the lead organisation, and they define ESD in three parts:

- It means education that enables people to foresee, face up to and solve the problems that threaten life on our planet.
- It also means education that disseminates the values and principles that are the basis of sustainable development (intergenerational equity, gender parity, social tolerance, poverty reduction, environmental protection and restoration, natural resource conservation, and just and peaceful societies).
- Lastly, it means education that highlights the complexity and interdependence of three spheres, the environment, society – broadly defined to include culture – and the economy (UNESCO, 2005: 5).

The main purpose of DESD is to integrate the principles, values and practices of sustainable development into all aspects of education and learning. The overarching goals of DESD are outlined by UNESCO as:

- Promote and improve the quality of education: The aim is to refocus lifelong education on the acquisition of knowledge, skills and values needed by citizens to improve their quality of life.
- Reorient the curricula: From pre-school to university, education must be rethought and reformed to be a vehicle of knowledge, thought patterns and values needed to build a sustainable world.
- Raise public awareness of the concept of sustainable development: This will make it possible to develop enlightened, active and responsible citizenship locally, nationally and internationally.
- Train the workforce: Continuing technical and vocational education of directors and workers, particularly those in trade and industry, will be enriched to enable them to adopt sustainable modes of production and consumption (UNESCO, 2009b: 7).

Education for sustainable development goes beyond the idea of topical learning and is promoted as a vehicle to drive transformative change through the establishment of a new culture based on the

promotion of values, attitudes and lifestyles for a sustainable society. This conceptualisation of ESD aims to cultivate and develop a global citizenry that is empathetic and responsive to the need to frame their own actions and behaviours within the objective of achieving a sustainable society and abating the pressing environmental problems such as climate change and biodiversity loss. ESD has the potential to bring a rights-based perspective to development issues to promote global justice and inclusive societies. ESD also offers a reformative aspect for educational systems and global learning objectives by promoting interdisciplinary learning, critical thinking and cooperative problem solving as progressive learning pedagogies. With the primary goal of empowering people to be responsible for the achievement of a sustainable future, it must be acknowledged though that in many ways ESD is pointing at an unknown future which makes it a challenging concept to contextualise. It is at this point that the benefits of ESC as a core theme of ESD demonstrates its practicality as an approach to bring direct relevance of sustainability principles into people's daily lives and consumption choices.

V. PROMOTING THE PRACTICE OF SUSTAINABLE CONSUMPTION IN EAST ASIAN COUNTRIES

The governments of China, Japan and Republic of Korea have all provided mandates to governmental agencies to take efforts to promote sustainable consumption. For instance, the newly formed Consumer Affairs Agency of the Japanese Cabinet Office has initiated inter-ministerial dialogues for better coordination of policy efforts on sustainable consumption and has established an ESC group in the Economic and Social Research Institute to provide support on effective consumer awareness raising. At the Eleventh Conference of the National Party of China in 2008, a new mandate was agreed upon for "the promotion of green consuming" to correlate with the *Circular Economy Promotion Law of the People's Republic of China* (effective 1 Jan 2009). The Korean "Presidential Committee on Green Growth" established a Green Lifestyle for Sustainable Development Team and coordinates national activities on Education for Green Growth including consumption practices.

The three East Asian countries have all developed many strong policies and approaches for advancing SCP in their respective countries. Earlier practices in these three countries, similarly to the history in Europe, began first with the promotion of cleaner production as the mainstay of governments' approaches. Following on from this, efforts to also address aspects of consumption were initiated in the late 1980s to early '90s in all three countries, although becoming more advanced in the new millennium.

The early policy efforts on sustainable consumption aimed at developing green markets in each country and replicated a regional good practice model originated in Japan. Reviewing the successful history of Japan's activities to promote and develop a green market, three main activities are highlighted as the good practice model that secured this success:

- Eco Mark Programme: Type I environmental labelling – established in 1989 by Japan Environmental Association and supported by the Ministry of Environment;
- Green Purchasing Network of Japan (GPN-J): established in 1996 as a collaboration between government, businesses, consumer associations and academia;
- Green Purchasing Law: enacted in 2000 to promote greener purchasing by the public sector at the lead of the Ministry of Environment.

These three activities are each linked to a different target. The Eco Mark Programme targets producers and works to steadily improve the environmental quality of production standards. The Green Purchasing Network targets consumers by providing voluntary guidelines for practicing environmentally responsible consumption. The Green Purchasing Law targets government and aims to establish the public sector as a leader of best practice. Table 1 on the following page depicts the development of these three approaches for promoting green markets among the three countries.

These first approaches towards sustainable consumption by the governments of East Asia can be understood as attempts to improve the overall infrastructure for sustainable consumption. It is really only since the new millennium that it is possible to identify policy approaches in East Asia that directly attempt to influence and change consumers' patterns of behaviour towards more responsible and sustainable consumption choices. There remains a current lack of understanding though of how to promote and reward more positive patterns of behaviour through policy interventions, especially when compared with the strong history of regulating against negative environmental practices.

From a formal education perspective, the uptake of ESC follows the wider uptake of education for sustainable development in relation to the start of the UN-DESD in 2005, but ESC still receives limited prioritisation in national curriculums. All three countries have developed very good practices in terms of environmental education, and they have also made efforts to integrate ESD into their educational programmes. The implementation of ESD though in these three countries is pursued through very different strategies, so it is only natural that the way in which ESC is also brought into the national curriculum will differ in each country.

The efforts on both SCP and also ESD have established broad institutional frameworks in the three East Asian countries that could be used for the advantage of further mainstreaming ESC into regular and effective implementation. Although the political mandate and will-power exists to enact ESC programmes, in many cases they remain unformulated because of the current lack of capacity and leadership for the advancement of responsible consumer behaviour. Despite diverse policy dialogues and many numbers of initiatives on SCP, there is still a lack of knowledge and experience on how to implement effective ESC. In order to properly address this matter, it is first necessary to identify and assess the current governmental approaches and strategies for promoting sustainable consumption.

The three countries have also worked to establish cooperative mechanisms for green promotion under the Tripartite Environment Ministers Meeting (TEMM) framework through the initiation of a Round Table Meeting (RTM) on Environmental Industry Cooperation in 2001. Eco-labelling was discussed by the RTM in 2003 and the next year measures to enhance environmental labelling and purchasing of environmentally friendly goods were outlined. A special Working Group (WG) on Common Standards for Environmental Labels was initiated in 2005 with members of China Environment United Certification Center, Korea Eco-Products Institute and Japan Environment Association representing the three respective national eco-labels.

Table 1: Green Market Mechanisms in China, Japan and Republic of Korea

	Environmental Labelling		Green Public Procurement		Other Green Market Mechanisms
	Eco Labels and other Type I labels	Type III Labels	National System/Law on Public Procurement	Green Purchasing Network	
CHINA	<p>✓CEC label since 1993; Managed by China Environmental Certification Center, a state-owned enterprise.</p> <p>Other labels include: Organic, Safe Agri-food, Water Conservation.</p>	<p>China Energy Label is a compulsory scheme; Managed by China National Institute of Standardization, an NPO.</p>	<p>✓National policy (since 2006) with good national-level implementation, but limited decentralisation.</p> <p>Jointly implemented by Environmental Protection Agency (SEPA) and Ministry of Finance.</p>	<p>China Green Purchasing Network (CGPN) was established in 2006.</p>	<p>MOEJ and IGPN provide support/capacity building for the development of China's GPP system.</p> <p>Switch-Asia projects is supporting GPP expansion in urban administrations.</p>
JAPAN	<p>✓Eco-Mark since 1989; Managed by Japan Environment Association (JEA), an NGO.</p> <p>Other labels include: Organic, CASBEE, Eco-Rail, & Green Pla(stics).</p>	<p>Eco-Leaf labelling on energy consumption based on LCA; Managed by JEMAI (state agency under METI).</p> <p>Energy Saving Label; Managed by Energy Conservation Center Japan (state agency under METI).</p>	<p>✓ National policy (since 2000) with full implementation across national and prefectural level; implemented in 73% of local towns/villages.</p> <p>Managed by the Environment and Economy Division of MOEJ.</p>	<p>The Green Purchasing Network-Japan was founded in 1996.</p>	<p>GPN-J was a main actor in the Sendai conference in 2004 that led to the founding of the International GPN.</p>
REPUBLIC OF KOREA	<p>✓ Korea Eco-Label (KoEco) since 1992; Managed by Korea Eco-Products Institute, now part of Korea Environmental Industry & Technology Institute (KEITI), a semi-governmental entity.</p>	<p>Energy Efficient Labelling; managed by Korea Energy Management Corporation (KEMCO), a non-profit governmental agency.</p>	<p>✓National policy (since 2004) and implementation.</p>	<p>Korea Green Purchasing Network (KGPN) was established in 1999.</p>	

This WG has since held annual meetings to discuss both green procurement and eco-labelling. In 2006, the three countries reached agreements on five areas: 1) intensifying information exchange, 2) the recommendation of green products by each countries' GPN in order to reach standards set by the other countries, 3) the development of common standards (water-based paints for China, stationery for Japan, personal computers and plastics for Korea) 4) the expansion of the RTM through the addition of a new theme, such as medical waste management, and 5) fixing the main themes for Environmental Industry Cooperation under TEMM as green procurement and eco-labelling. The 6th TEMM RTM on Environmental Industry Cooperation was held in September 2006 in China and addressed mutual recognition of eco-labelling schemes, green procurement, environmental management for small and medium-sized enterprises (SMEs), and environmental information exchange (TEMM website; accessed 10 September 2010).

VI. RESEARCH STRUCTURE AND METHODS

The research conducted for this report focused primarily on governmental capacity for effective ESC implementation at a national level, however it also included a small portion of research on sub-national level governance at prefectural and municipal levels. The research aimed to identify relevant policies on SCP generally and ESC specifically and to provide an assessment of current governmental capacity for ESC implementation. The main goal of this research is to identify pathways for improving the overall performance of ESC implementation. The findings from this research should identify the key aspects of the current governmental context for promoting sustainable consumption and consumer awareness raising (including relevant policy frameworks, overall strategies, understandings of government officers, and barriers and obstacles to implementation). The outputs should also give consideration to opportunities for better policy integration between wider SCP policies and specific ESC initiatives.

Primary research was conducted in China, Japan and Republic of Korea to investigate governmental capacity and strategies for promoting sustainable consumption and to identify opportunities for improving the implementation of ESC. This research was conducted in collaboration with research partners from Beijing Normal University, Tokyo City University and Consumers Union of Korea respectively. The research was structured with two main objectives: 1) To identify the current policy framework and governmental strategies for promoting sustainable consumption and implementing ESC; and 2) To assess the current governmental capacity for implementing effective ESC and influencing consumer behaviour towards responsible and sustainable consumption (identifying both the strengths and weaknesses of current capacity).

The main methods for data collection were primary interviews, survey/questionnaires, analysis of government policy documents and reports, and from secondary literature review. The target respondents were three-fold: 60% focus on relevant officers from national governments (including Ministries of Environment, Education and Trade); 20% focus on relevant officers from one municipal or provincial government,; and 20% focus on relevant NGOs and civil society organisations. Each research partner applied a slightly different approach to research in their respective country, however in all three countries the main research method was through face-to-face interviews with government officers guided by a structured interview schedule of mainly open-ended questions (see

Appendix 1 for interview schedules). Country case studies were prepared by the research partners based on the information they collected during this research process.

In December 2010, the preliminary results of this research were subject to a review and feedback process during IGES's East Asia workshop on Education for Sustainable Consumption, held at Beijing Normal University. This provided the research partners the opportunity to compare findings and assessment techniques. It also allotted them the opportunity to have their collected data reviewed by a series of peers from each country including relevant government officers and to identify areas for additional needed research. A series of initial recommendations were also outlined during this workshop:

- Identifying clear policy mechanisms and strategies for promoting sustainable consumption and influencing consumer behaviour. ESC should be integrated with policy efforts on both Sustainable Consumption & Production (SCP) and Education for Sustainable Development (ESD).
- Utilize existing frameworks on Environmental Education (EE) and Education for Sustainable Development (ESD) in each country to implement ESC.
- Capacity building for government officers to effectively promote ESC.
- Develop pilot projects under which effective implementation of ESC can be experimented with and tested prior to national implementation.
- Strengthen linkages between national policies and local level implementation and also between top-down and bottom-up approaches. Better linkages between government and civil society can also help to achieve these linkages.
- The promotion of sustainable consumption and sustainable lifestyles in East Asia should establish a strong connection with traditional cultural values as the countries already have good examples of sustainable livelihood practices and community practice rooted in traditional cultural values.
- Engage more directly with citizens' needs and concerns especially related to well-being and quality-of-life, as a connection with sustainable consumption can move concerns from an individual dimension to a social dimension (see Didham, 2010).

The three country case studies were subsequently utilised to conduct a comparative analysis of strengths, weaknesses, and constraints in ESC implementation across the three countries. This analysis was conducted primarily as a capacity assessment of the current institutions and strategies for promoting SC and implementing ESC in each country. The analytical framework for this country comparison is based on the capacity assessment framework that formulates step two of UNDP's capacity development approach (further explanation is provided in chapter 5). This is structured on the four levers of change identified in the capacity development framework utilised by the United Nations Development Program. These are: 1) institutional arrangements, 2) leadership, 3) knowledge, and 4) accountability (UNDP, 2010: 7-13). This analytical framework supports the identification of opportunities to strengthen ESC implementation and better integrate policies and programmes to maximise impact through an investigation of key leverage points for improving policy strategies, governmental approaches and institutional capacities and also for heightening synergetic relationships across these systems.

Through the comparative analysis of the three countries' existing capacities for ESC implementation, six main areas were identified for improving overall practice:

- Expanding coverage beyond the national government for the roles and responsibilities in promoting sustainable consumption.
- Applying multiple policy mechanisms and inter-ministerial/inter-agency approaches.
- Define policy priorities and target areas for sustainable consumption.
- Addressing ESD as a thematic approach to ESD and SCP.
- Improving accountability as a means to strengthen the overall system.
- Advancing ESC in formal education curriculums.

These recommendations are detailed and explained how to implement in chapter 6.

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CHAPTER 2

EDUCATION FOR SUSTAINABLE CONSUMPTION IN P. R. CHINA: *Current policy frameworks, implementation and governmental capacity*

Qing TIAN²

I. INTRODUCTION

At present, the consumption problem is already a vital issue to affect the progress of global sustainable development. Sustainable consumption is a worldwide issue that has rapidly developed and gained attention. In the main commitments made by the participants of the World Sustainable Development Summit held in Johannesburg in 2002, the most important one was to change the unsustainable patterns of consumption and production in the world^[1]. After the Summit, the United Nations Environment Program and UN-DESA established a preparatory process to develop a Ten Year Framework of Programmes on Sustainable Consumption and Production (10YFP on SCP) which was discussed at the UN Commission for Sustainable Development's 19th meeting in May 2011.

China is at the stage of industrialization, and the country is undergoing rapid economic and social development. As a developing country with an extremely large population, the sustainable consumption problem is very prominent in China. The Chinese government pays high attention to sustainable development, and the State Council proposed in 2005: "In the link with consumption, it should vigorously initiate consumption in an environmentally friendly way."^[2-3] The goal to establish a well-off society was clearly proposed by the 17th National Congress of the Communist Party of China in 2007, and one means was to set up the ecological civilization to form the new consumption pattern^[4].

In the direction to shift consumption to achieve sustainable development, the importance of education is increasingly highlighted. Education is an important mechanism to solve present patterns of unsustainable consumption. Consumption concerns the lifestyle which is usually regarded as personal behavior, but from the point of view of sustainable development the lifestyle is also seen as social behavior. Sustainable consumption means a transformation of lifestyle, and this can significantly affect social production practices and the relevant policy formulation. Therefore, sustainable consumption requires the cooperation of the government, enterprises, schools, the media and from all walks of life within society, to strengthen the awareness of sustainable consumption by consumers, to advance reform of consumption altogether, and then to impel the entire society to shift towards sustainable development.

In light of the development path towards an increasingly global economy, it is important that education for sustainable consumption is developed not only at the national level but also at regional and global levels for common action. The realisation of sustainable consumption requires the

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establishment of a series of guarantee mechanisms including market controls, production, rewards and punishment, communication and education mechanisms. The education and communication mechanisms need to deepen sustainable consumption from the level of awareness and knowledge towards the promotion of conscious action of consumers.

China has the moral virtue of prudence and saving. Questioning how to inherit and innovate the society's unique natural and cultural contents may help modernize sustainable consumption education in line with the outstanding historical and cultural traditions of China. A second important question is how to cooperate and develop environmental education actions which will respond to the sustainable development and consumption problems at all levels in the global world.

As a centralized country, the influence from the government of China cannot be neglected. So concern and research about the government capacity on sustainable consumption and education for sustainable consumption have great importance for the promotion ESC throughout China.

II. EXISTING POLICY FRAMEWORKS ON SCP & ESC

A. Policies on SCP

After reviewing the websites of the central government, the ministries and Beijing municipal government, it was found that the central government enacts policy and local governments like Beijing municipal government will take the leading role of implementing the policies from the central government. The policies related with Sustainable Consumption and Production, Education for Sustainable Consumption are listed in table 2 below. These policies were enacted by the central government and Ministries in recent years.

i. General policies enacted and issued by the Central government departments, which are State Council and National Development and Reform Commission

The general policies enacted and issued by the State Council, are related with both sustainable production and consumption. The policies focus on four themes including energy saving and emissions reduction, conservation-oriented society, low carbon society, and tax preference. These policies are aimed at not only sustainable production, but also at sustainable consumption^{[2-3][5-8]}.

The policies from the National Development and Reform Commission (NDRC) have the role of explaining the General policies from the State Council and distribute the implementation tasks to the specific Ministries according to the general policies from the State Council. So the National Development and Reform Commission on the one hand will enact and issue the policies aimed at the Ministries targeting their specific management areas on both production and consumption, on the other hand it will enact and issue some general policies which cover inter-ministerial issues like Government Green Purchasing policy, Low-carbon City Construction policy, jointly organising all the Ministries together to make the National Energy Saving and Emissions Reduction Initiative policy to call on public participation in environmental initiative activities^[9-13].

TABLE 2: THE POLICIES OF THE CENTRAL GOVERNMENTS ADDRESSING SCP AND ESC IN CHINA

No.	Government	Theme of the policies
1	State Council	Energy saving, pollution emissions reduction ^{[2][5][6]} , resource-saving society ^[3] , low-carbon society ^[7] , consumption tax discount (including law and policy) ^[8]
2	National Development and Reform Commission	1 Co-ordinate policy of varied Ministries: energy (water and electric), production (Sci. & Tech., Industry and Information, Construction, Agriculture and Forest, etc), financial and traffic (tax, commerce ministry) ^[9-11] 2 Focus on government purchasing ^[12-13] 3 Promote low-carbon city construction ^[14] 4 Initiate cross-ministry education and communication movement in low-carbon area ^[15]
3	Ministry of Environmental Protection (MEP)	1 Environmental certification ^[16-18] 2 Food ^[19] , traffic ^[20-21] , rubbish treatment ^[22] , etc. 3 Special policies in sustainable consumption, eg. Three Green engineering in 2004 ^[23] 4 Special promotion on communication and education, based on green school & community, including the content of green consumption and green lifestyles ^[24-25]
4	Ministry of Finance	1 Encourage government green purchasing, issue lists of green certified products ^[17-18] ^[26] 2 Promote products with efficient energy consumption by consumption tax discount like car, household appliances ^[10] ^[27-36] , etc.
5	Ministry of Commerce (China Consumer Association)	1 Green consumption ^[37-39] 2 Food safety ^[40-41] 3 Three green engineer ^[23] ^[42-46]
6	Administration of Press and Publishing	Co-operate with other Ministries like MEP & MOE to print with Environmentally Certified paper ^[47]
7	Ministry of Agriculture	Promotion of Non-pollution ^[48] , non-GMO production ^[49] , Promotion of quality and safe production ^[50-52] , renewable energy in rural area ^[53] , safe pesticide management ^[54-57]
8	State Forestry Administration	Forest production management (like forest harvesting, animal production trade) ^[58-60] , plant trees to increase carbon sink (plant trees and forest reclamation from agriculture fields or return farmland to forest ^[61-62]), communication on green lifestyles (including consumption patterns change) ^[63]
9	Ministry of Education	Summarized in “Environmental Education Guideline” ^[64] and “Syllabus on EE theme education” ^[65] Resource-saving school construction (save energy, pollution reduction, and low carbon building) ^[66-67]
10	Ministry of Industry and Information Technology	Recycling economy (for production process) ^[68] , save energy and pollution reduction ^[69-71] , encourage energy saving products (for buildings, cars, appliances, etc.) ^[72-73]

ii. General policies on both Sustainable Production and Consumption enacted and issued by the Ministries, which are Ministry of Environmental Protection and Ministry of Finance

The related policies enacted by Ministry of Environmental Protection (MEP) focused on Environmental Certification and Environmental Management, including food, transportation and vehicle, garbage disposal, etc., which are all related with both sustainable production and consumption. Since 2004, MEP has placed high priority on promoting the policy on Sustainable

Consumption. Furthermore, MEP has continuously and extensively worked to promote and advocate green lifestyles in formal school education and public life through communication and education^[16-25]. The related policies enacted by the Ministry of Finance involved sustainable production and consumption, and focused on adjustment of tax to both bulk commodity and identification of items for government purchase^[26-36].

iii. Policies on Sustainable Production enacted and issued by the Ministries, which are Administration of Press and Publishing, Ministry of Agriculture, State Forestry Administration and Ministry of Industry and Information Technology

- The Administration of Press and Publishing promoted the policy on printing and paper production with China Environmental Certification and Labeling^[47].
- The Ministry of Agriculture enacted and issued policies focusing on green agricultural production and food safety, but not affecting value-added goods or commodity items^[48-57].
- The State Forestry Administration enacted and issued policies concerned with Sustainable Forest Production and increasing the carbon sink through planting trees, but these also do not affect concrete commodity items. At the same time, the State Forestry Administration issued a communication policy on promoting and advocating green lifestyles to the public to disseminate these good ideas in the society^[58-63].
- The Ministry of Industry and Information Technology enacted and issued policies focused on the area of Sustainable Production, including circular economy, energy saving and emissions reduction, bulk commodity production such as building construction, transportation and vehicles^[68-73].

iv. Policies on Sustainable Consumption enacted and issued by the Ministries, which is the Ministry of Commerce

The related policies from Ministry of Commerce are concerned with green consumption, food safety and “Three Green Projects: promoting green consumption, nurturing green markets and developing green logistics”, which was emphasized to disseminate the rationality and objectives of Sustainable Consumption by linking with economic circulation in order to promote Sustainable Production^{[23][37-46]}.

v. Policies on both Education for Sustainable Consumption and Education for Sustainable Production enacted and issued by Ministries, which is Ministry of Education

In the Environmental Education Curriculum documents enacted and issued by the Ministry of Education, there are contents specifically concerned with and aimed at developing students’ environmentally friendly lifestyles including the promotion of environmentally responsible consumption in education. At the same time, there are contents in these documents concerned with and pointing out the need to incorporate education on environmentally friendly production into education on Circular Economy^[64-65]. Moreover, the Ministry of Education has enacted and issued special policy on Constructing Conservation-oriented School and Universities^[66-67].

From the policies issued by the central government and varied Ministries that were identified, it is found that Sustainable Production is given more attention than Sustainable Consumption by the government. Regarding the policy on Education for Sustainable Consumption, the number of Ministries working in this specific area is lowest and the number of policies is less than for any other related area, and the contents in these policies are very also simple, short and brief. The inter-ministerial policies on Sustainable Production are concerned more about bulk commodities like building construction, transportation and vehicles. Agriculture, food and forest production are the concern of single Ministries and agencies, and there is no cross-ministry policies support them.

B. The role of consumer awareness raising and education for promoting sustainable consumption in Chinese policy (i.e. specific policies or suggestions for ESC)

After checking the policy document contents of varied Ministries, it is found that the overall number of policies related to Sustainable Consumption is small. While the number of Ministries who have enacted and issued policies on the promotion consumer's awareness and Education for Sustainable Consumption is even less, and concentrated to MEP, the National Development and Reform Commission, the China Consumer Association which is an affiliated organization of the Ministry of Commerce, and the Forestry Administration. Among these ministries and organizations, the China Consumer Association initiated more communication activities than the others. This situation demonstrates three important points:

- 1) Education for Sustainable Consumption has not received significant concern and has not been regarded as a priority issue.
- 2) Inter-Ministerial co-operation, which is needed for successful promotion of Sustainable Consumption and ESC, has not received enough concern or regard as an important issue to be addressed by the central government.
- 3) The present work concentrates on only a few major commodity items such as cars, but is not the majority of that are possible concerns. This situation shows that the idea and rationale of Sustainable Consumption is driven through a top down approach, that effects and ranges of its dissemination are limited, and that the dissemination serves only for industrial transformation in scientific and technological areas. But the communication for public cognition on green production is not the main point that current policy emphasizes. That is to say the State does not make use of these policy opportunities to promote public green awareness education or encourage public participation in these activities.

But if these policies efforts are to achieve the primary objective of sustainable development through the process of Circular Economy – which is to be composed by the starting link of Sustainable Production, through the mid-link of Sustainable Circulation, to the final link of Sustainable Consumption – the role of Education for Sustainable Consumption is irreplaceable. So it remains to awaken the cognition of the government and public to the importance of ESC in order to promote sustainability through the process of sustainable consumption.

C. ESC aspects in formal education curriculum

In the curriculum documents of *Environmental Education Guideline for Primary and Middle School* and *Theme Education Syllabus on Environmental Education for Primary and Middle School* enacted and issued by China Ministry of Education in 2003, there are contents specifically concerned with and aimed at developing students' environmentally friendly lifestyles including the promotion of environmentally responsible consumption through education. At the same time, there are contents identifying the need for educational efforts in regards to environmentally responsible production, especially in line with education on Circular Economy^[64-65].

These two education requirements will be implemented through two approaches, the first is to permeate ESC and Education for Sustainable Production into various subjects, which is referred to as the multi-disciplinary permeation method. The second approach is to be implemented by project carried out under the *Comprehension and Practice Activity time* in schools. The multi-disciplinary method belongs to National Curriculum level, the project belongs to Local Curriculum level and School Curriculum level. Whether the concrete process of teaching will involve the contents of Sustainable Production and Consumption or not will be decided by the teachers themselves.

Moreover, the Ministry of Education has enacted and issued a special policy on Constructing Conservation-oriented Schools and Universities. This policy emphasizes the need to implement energy savings, emissions reductions and low carbon actions in schools and university through campus management rather than through curriculum and subject teaching. Campus management is currently executed by the back offices of schools and universities which links closely with the hardware construction in campuses and seldom touches on formal curriculums in schools or universities.

In the past five years, there have been news reports that some local Education Committees like Mentougou District in Beijing have enacted and issued policies requiring an increase in education for consumer awareness on safeguarded legal rights in primary schools in their law education dimension. Whether the local primary schools carried out ESC or not and how it was carried out along with its continuation were fully decided by the principles' requirements and teachers' willingness and capacities in schools. No further evidence on the effects of such efforts was available^[74].

III. CURRENT GOVERNMENTAL STRATEGIES FOR PROMOTING SUSTAINABLE CONSUMPTION

(SUMMARY OF INTERVIEW FINDINGS)

A. National level

During September to December 2010, after interviewing 8 officers in 4 Ministries on policies and their implementation about Sustainable Production and Consumption and Education for Sustainable Consumption, shown in Table 3, the following was found.

i. All officers were guarded in their speech during the interview

The attitude of caution for each interviewed officer reflects their concern of any potential misunderstandings in the interview resulting in negative impacts for their careers. During the interviews, the officers in higher-level positions were willing to say more than the officers with lower-level positions whose speech and attitude remained very conservative. Officers in various organizations showed differing degrees of caution. Those officers who worked in the Ministries that take more responsibility for and have leading positions in SCP, dared to talk with a more open mind and attitude, such as the officers from MEP. The officers with less responsibility for implementation of SCP or who have a more limited history working with it were relatively guarded in their speech. Furthermore, there were some Ministries that refused to have interviews on SCP and ESC altogether.

TABLE 3: THE INTERVIEWS OF OFFICERS IN THE NATIONAL GOVERNMENT

No.	Government	Division	Interview date
1	Ministry of Environmental Protection	Environmental Certification Center	11 th Oct., 2010
2		Communication section of CEEC	27 th Oct., 2010
3		General Section of CEEC	1 st Dec., 2010
4		Education section of CEEC	1 st Dec., 2010
5	National Development and Reform Commission	International economic co-operation section	29 th Sept., 2010
6	China Consumer Association, Ministry of Commerce		3 rd Sept., 2010
7	Anonymous respondents		10 th Sept., 2010
8			10 th Sept., 2010

ii. The degree of strength and commitment for promoting related policy are varied among Ministries

The Ministry of Environmental Protection is the most active ministry and most actively directs its efforts towards promoting SCP related work among the central government departments. The promotion of related SCP policy by the MEP to State Council is the main process for influencing the overall strategies of the national government. However, such issues have often faced strong resistance or indifference not only from the State Council but also from other stakeholders with higher level positions, and have even been deprived of a potentially corresponding function by such strong stakeholders. Such experience built up the leading role and position for MEP in this area. MEP not only enacted and issued policies on SCP from the angle of environmental management, but it also suggested related policies to the State Council and the National Development and Reform Commission, as well as resisted the pressures from other individual stakeholders, to promote the progress and work on SCP.²

² The person being interviewed in corresponding section of MEP pointed out it's one of the obstacles resulted from management by people not law in environmental certification area.

MEP has at times cooperated with other ministries to promote SCP together. For example, MEP worked with the Ministry of Education and the Administration of Press and Publishing to promote the usage of paper certified by the Forest Stewardship Council in all printed textbook in schools, and also promoted SCP in regards to building and construction, vehicles, chemical industry and electric appliances in cooperation with other ministries.³

The National Development and Reform Commission is another active State agency that promotes SCP. It can make use of its superior role in coordinating inter-ministerial policies to promote SCP policies across multiple ministries, for example, the NDRC led the sixteen ministries to initiate National Energy Saving and Emission Reduction policy.⁴

The Ministry of Education has joined the inter-ministerial action and policy making, but most of the time the Ministry of Education works independent of other ministries' efforts. The policy from the Ministry of Education remains stable and is not easy to change. During the periods when educational reform is expected, the Ministry of Education will actively make new policies, otherwise policy changes will generally only happen under the pressure from international or national levels to respond to the requirements from State Council. This nature of the education policy and the reform process has resulted in a conservative approach to the teaching material and the nature of education itself. It has also led to a lack of the concern regarding environmental education and education for sustainability as topics for investigation in the area of education policy research for a long period of time.

iii. The practice effects decided by the strength of Inter-Ministerial cooperation to promote related policies

The practice effects on SCP policies made by MEP, after promoted together by the NDRC and tax preferences policies by Ministry of Finance to mix the policy roles together, were very good.

Regarding the China Consumer Association led by the Ministry of Commerce, even the officers in the China Consumer Association said it was difficult to assess the effects of some of its related work on SCP⁵, which was promoted by itself in its own management area through communication in media and education, but without any parallel policies supported by the Ministry of Finance. Actually, the affairs in the area of Circular Economy have a close relationship with not only the upper reaches of the production process and environmental certification, but also with the lower reaches of consumption. It is a special key link which requires parallel policies on finance, communication and education from multiple ministries to take efforts together to promote SCP. Currently, the China Consumer Association led by the Ministry of Commerce has not realized this potential role and requested support from Inter-Ministerial policies to support its work, instead the association prefers to work independently. The China Consumer Association has an unique legal agency under the government, as it has no feedback systems auditing the organization's work or the directions set by upper administration of this agency, and there is no competition to its working field.

³ The person being interviewed in corresponding section of MEP pointed out the achievement from multi-ministries' co-operation.

⁴ The person being interviewed in corresponding section of NDRC pointed out the roles and effects of the cross-ministries policies.

⁵ The interviewee from corresponding section of Ministry of Commerce pointed out this issue.

The inspiration gained from this interview is that because Sustainable Production and Consumption relate to the affairs of multiple ministries and is an issue that crosses broader economic policy with areas that directly affects the affairs of individuals' daily lives, it is necessary to gain support from all related ministries to work together to promote SCP policies and practices in order to develop strong and effective solutions. Without such cooperation, it will likely take twice the work to achieve only a half of the same potential results.

iv. *Successful Policy and Action – decided by an all-win solution for economic, social and environmental issues*

From the information collected during the interviews, it was found that the best effects of a policy and its implementation are reached by making use of an economic lever like tax reference policies made by Ministry of Finance, to lead the transition to Sustainability. Such successful cases concentrated on bulk commodities and their tax references (including cars, electric appliances, building construction, etc) were related with energy consumption items.

When a policy and its implementation can guide industry to further profits, and sustainable development helps the industry or business corporation get economic profits, the industry and business corporation are willing to transfer to the direction of sustainability.

v. *The authority of Environmental Certification for products is regularly disturbed*

The Environmental Certification Center of MEP is a special professional governmental organization responsible for environmental certification and labelling for products. The authority and professional capacity on environmental certification has been recognized and respected by the market and public. But in recent years, the area of environmental certification work was disturbed by some reasons to make confusion in the area of environmental certification. Unfortunately, this has led to many people in China giving up their trust in the authority of the country's environmental label and environmental certification.⁶

vi. *The policies on Low Carbon and their implementation focus on the area of Sustainable Production*

"Low carbon" now is one of the key and hot words in China society and media. But from the collected interview information, the practical implementation of Low Carbon policy was mainly concentrated on the area of production, directed by the Circular Economy model, energy savings and emissions reductions, alternative energy industry development, etc. The Chinese government is concerned less with policy and its implementation on Sustainable Consumption. The existing SC oriented policy is mainly aimed at advocating for public action in regards to national energy saving and emissions reduction; the implementation actions are fragmentary and scattered. When people change their behaviors in ordinary living according to these low carbon suggestions, it presents many inconveniences to their daily life due to the fact that the public facilities do not match with such low carbon policies and behaviors. So the effects of policy implementation are difficult to assess.

⁶ Citation from the interviewees from Ministry of Environment Protection.

The reason may be related with the following statistic. The carbon emissions from people's daily life are just 24% of the total in China^[75], the potential for reducing carbon emissions is limited in this sector. While the carbon emissions from industrial production is 76% of the total in China^[75]. Carbon emissions reduction concentrated on the industrial production area is a reasonable approach. But most of the products were exported abroad. The economic increase in Chinese society depended on the GDP produced and contributed by industrial production, but it also depended on GDP contributed by people's consumption in Europe. So it is estimated that the potential to guide the industrial production towards a more sustainable path through the influence of changes in public daily life and consumption choice by Chinese citizens is much lower than generally expected by the common hypothesis on sustainable production. On the contrary, the consumer who consumes Chinese industrial products abroad will influence Chinese industrial exported production by their sustainable consumption behavior and choice, and then have the possibility and strength to promote Chinese industrial production towards the direction of sustainability and the low carbon economic model.

vii. Efforts on Education for Sustainable Consumption at national level have primarily aimed at practical implementation

The contents on Sustainable Consumption and Production in the curriculum documents of the Ministry of Education are always brief and summarized policy statements, which meets its position at the national level because its function is to promote and result in influence across a large range of perspectives. But the policy and its corresponding work on ESC, even on environmental education, at the Ministry of Education have not received substantial responses and implementation from its lower ranked institutes⁷. SCP and ESC are contained in some educational policies, but there is a lack of mid-level capacity to carry out and implement these policies into practice.

The work from the Center for Environmental Education and Communication of MEP (CEEC) is the only government organization at the national level which is concerned about EE and ESC in formal education area outside of the Ministry of Education. This government organization however mainly pays attention to working with concrete projects at the school level and does not get involved in top-level, policy design. For example, CEEC is involved in training for school teachers, training young men to be messengers of Climate Change⁸, directing green school construction⁹, etc. CEEC seldom takes the role of policy organization at the national level. The work of CEEC is disengaged from the mainstream requirements of MEP. Thus, the overall effects of CEEC's many endeavors in regards to policy implementation is very limited and less than many local government organizations'. Regarding its practical implementation projects in formal education, CEEC does not implement projects in specific accordance with the macro policy from the Ministry of Education, but according to the agency's own profit-aimed needs as CEEC is a for-profit organization¹⁰. These reasons have led to a scenario where the work done on EE and ESC cannot be developed to form a system model to be replicated for greater impact, except the green school project initiated by both CEEC of MEP and Ministry of Education.

⁷ The problem referred to by the corresponding section/ministries of Central Government when interviewed.

⁸ The corresponding section of MEP talked about it when interviewed.

⁹ The same source as the 7th.

¹⁰ The same source as the 7th.

Most of the existing works in schools on ESC have been fully decided by the individual teacher's own knowledge and understandings. The reason for this is the lack of mid-level strength between the Ministry of Education and individual teachers for implementing this teaching.

viii. *The national government and local government are the main actors with responsibility for achieving sustainable development*

In the interview, most of the officers expressed that the national and local governments are the main actors with responsibility for achieving sustainable development¹¹, such situation was decided by the current government of China. Because the industry is initiated by the government, business and the Circular Economy models are managed by the government, and social distribution is also decided and controlled by the government. Thus, any improvement towards sustainable development should start from the government. The Chinese government at all level is a very powerful actor for influencing this type of change.

ix. *Most Government Organizations thought that capacity building was not necessary for their organization*

During the interview, each central government organization expressed that their capacity is enough to be qualified for their work on EE and Education for Sustainable Consumption and Production, and furthermore that capacity building for them was unnecessary¹². The reason is that these governmental officers thought the work on environmental protection work and on SCP does not require professional capacity as long as long as the professional is qualified in the area of Environmental Protection.

The interviewees also expressed an equal understanding for the meanings of "communication" and "education", which is to spread information to the public. There are no actions or plans currently taken to measure the effects of "communication" and "education" to prove any benefits of the existing education or communication work.

Only the officers from the National Development and Reform Commission thought the professional human resources in EE, ESC and SCP are currently lacking, and also that not enough basic education and higher education is provided in these areas for effective human resource development. This was recognized as a major barrier for the development of ESC. It was also suggested that better methods for the dissemination of corresponding research achievements should be formulated to provide the government with good recommendations from these researches to be incorporate into the decision making of government in the future¹³.

¹¹ From the multiple ministries when interviewed.

¹² Almost all the ministries's opinion except National Development and Reform Committee.

¹³ Source from the Nationa Development and Reform Committee.

x. *Low-income is an important influence for people's consumption patterns and transfer to Sustainable Consumption in China*

The fact that many citizens all over China still have very low incomes must be taken into consideration when working with SCP and ESC. In the consumption area, most consumers' behavior and choices have recently changed from concern only with the quantity of products they would be able to consume to also include concerns about the quality of the products and their effects on personal health and safety¹⁴. But the concept of sustainable consumption further emphasizes concern about the environmental influence of the product during its production and consumption, Such awareness of the consumers will need to be awakened in various ways in the future including linking sustainable consumption to issues of social justice, equality, world trade, economic running system, social management and other global issues.

B. Municipal level

The local level case is taken from Beijing as an example. The interviews were carried out at the Beijing Environmental Education and Communication Center of Beijing Municipal Environmental Protection Bureau, shown in the following table 4.

i. *It is important to get policy support from central government*

The related works in Beijing are in accordance with the policy from central government to be carried out and implemented. For example, the repair or removal of vehicles which fail to meet the first level of European standards for exhaust emissions (Euro 1 from 1993), which was ordered by Beijing government to the Beijing Environmental Education and Communication Center at Beijing Municipal Environmental Protection Bureau. Due to the policy support from the central government, the good human resource arrangement, the working position set up, and the cooperation from media, the efforts on this project are going very smoothly to ensure the task to be finished with the highest quality and efficiency and also receiving a very high level evaluation from the public.¹⁵

TABLE 4: THE INTERVIEWS WITH BEIJING GOVERNMENTAL ORGANISATIONS

No.	Category	Government	Division	Interview date
1	Local government, 2 officers in 1 organization	Beijing Municipal Environmental Protection Bureau	Beijing Environmental Education and Communication Center	16 th Nov. 2010
2			Beijing Environmental Education and Communication Center	16 th Nor. 2010

¹⁴ Source is same as the 12th.

¹⁵ The source from the Communication and Education Section of Beijing Municipal Environmental Protection Bureau when interviewed.

ii. It is crucial to ensure financial support

The policy implementation work at Beijing level needs to ensure enough, stable financial support. For example, the Beijing Municipal Environmental Protection Bureau allocated the full fund to its Beijing Environmental Education and Communication Center to implement the policy made by the central government. The staffs working in this center concentrated all their efforts to ensure that all policy aspects are carried out and implemented with highest quality. No work has deviated from the expected aim, each task was finished with high quality and everything has been carried through to the end. This organization created and led a great quantity of environmental communication and education projects maintaining their continuity over the long-term, such as the Environmental Culture Week Activity for University, which had lasted for 6 years in 2010, to add green consumption communication and education contents during the air quality weekly report on TV, and to independently establish green media producing center to make an environmental protection program for a TV station in Beijing.¹⁶

Compare this with CEEC of MEP which receives no direct financial assurance or support from the government, and CEEC of MEP must try to find financial support by itself.¹⁷ So compared with the work at CEEC, the Beijing Environmental Education and Communication Center at Beijing Municipal Environmental Protection Bureau overall work, especially its quality and influence, is more advanced than CEEC. The main reason is that pursuing profit must be the first task for CEEC¹⁸, thus the director and staff have significantly less time to devote to their work. CEEC is forced to plan its efforts based on concern about how to get income and how to get more from the financial distribution, but not on how to make the work better and to improve its effectiveness. This drive for funding in CEEC unfortunately means that little time in comparison with the Beijing Environmental Education and Communication Center is directed towards considering and improving the effects and influence of their work and for the professional capacity promotion of their institute or staff. This is in part a major explanation for why after the Green School Program was promoted for more than ten years by CEEC, the quantity of green schools in China is higher than in any other country, but the quality is difficult to say. That is related directly to the profit-aimed thinking and orientation for CEEC.

The operational system is not correct, and the lack of financial assurance heavily constrains the work and development of CEEC in the future.¹⁹

iii. The choice of the right moment to initiate or act is important

The Beijing Environmental Education and Communication Center at Beijing Municipal Environmental Protection Bureau has led the national activity of decreasing the use of car by one day, because it was able to grasp the right moment of “Green Beijing Olympic Games”, promoted by the Chinese central government in the preparations to the 2008 Beijing Olympic Game, to make this activity sustainable till now and get support from more and more people all over the country.²⁰ This is because this organization was able to identify and grasp the appropriate moment to promote proper activity for very strong social effects.

¹⁶ The same source as the 14th.

¹⁷ Source from the corresponding section of MEP when interviewed.

¹⁸ The same source as the 16th.

¹⁹ Source from the corresponding section of MEP when interviewed.

²⁰ Source from the corresponding local government in Beijing when interviewed.

iv. Co-operating with NGOs and Civil Society is helpful to the implementation work

The Beijing Environmental Education and Communication Center at Beijing Municipal Environmental Protection Bureau regularly cooperates with the USA Environmental Foundation and some local NGOs, and has also had cooperation with public institute and universities in Beijing²¹. These cooperative activities have been of benefit for the Beijing Environmental Education and Communication Center as a means to get more good ideas for implementation and to improve the level of quality for specific project implementation.

v. Citizen or consumer identified as the main actors with responsibility for achieving sustainable development

“At the local level it was identified that because consumers stimulate consumption, it is the citizens/consumers that are the main actors with responsibility for achieving sustainable development”.²² This contrast the idea held by the national government, and is explained with the proposition that if each consumer take direct concern over his environmental friendly behavior in daily life at home and at work, then low carbon development would easily be reached. So the target group for people working in areas of communication and education should not not limited only to the children in the formal education system, but should also include the general public.²³

Thus, the promotion of public participation is not only a good means to improve environmental protection, but it can also serve as a good strategy for citizen education. This why the Beijing Environmental Education and Communication Center at Beijing Municipal Environmental Protection Bureau has intensively worked for many years to promote public participation in efforts for environmental protection like the activity of decreasing the use of car by one day.

vi. Capacity building is very important

The Beijing Environmental Education and Communication Center at Beijing Municipal Environmental Protection Bureau desire to promote a strong intellectual capacity and conviction in its employees for the work they are doing. “To be young and energetic, love environmental protection work, active and professional, are the professional talents that are deemed important to the quality and effects of the working”.²⁴ So the Beijing Environmental Education and Communication Center regularly creates opportunities for professional development especially for its younger employees, offers young professional the opportunity to be part-time learners to improve their theory level in university, and provides practice opportunities to develop their capacities.

²¹ Source is the same as the 19th.

²² Source is the same as the 19th.

²³ Source is the same as the 19th.

²⁴ Source from the corresponding local government in Beijing when interviewed.

vii. No difficulty for implementation work

Because the Beijing Environmental Education and Communication Center at Beijing Municipal Environmental Protection Bureau receives full financial support from the local government, the fund for working is always ensured. So the work and policy implementation in recent years have all been smooth and effective to a high quality and with no major restraints.²⁵

viii. Insist for the continued usage of public awareness investigations as the feedback for self-evaluation

The Beijing Environmental Education and Communication Center makes public environmental awareness investigations every year and openly publishes the annual report, which is used as the basis for self-evaluation in this organization. The series of annual reports show that public environmental awareness has improved.²⁶ This is a self-evaluation and feedback system that the Communication and Education Section conducts in order to adjust its future work arrangements and to promote creative solutions in ordinary work.

C. General capacity and understandings on promoting sustainable consumption and influencing consumer behavior

i. The government capacity

In order to promote Sustainable Consumption, it is necessary for the government to make policy efforts from the area of production to the area of economy. In addition, it is also need to increase the efforts on the policy communication and corresponding education activities.

It was decided for the Chinese government to make its main efforts in the area of production due to China's status as a major global producer and the global division of labour under which China relies on exporting. This was also decided as a functional approach under the system of autarchy in China that sees the government take on many roles – as factory boss and manager, as manager of the country and its resources, as decision maker of policy, as executor of policy, as monitor of the market, and as the beneficiary. Because China has become the “world factory” during its period of rapid economic growth, the substantial increase environmental impacts from China is contributed by these production processes. When the production faces problem, it is not only people who face the risk of personal or family ruin, but it is also the government that will firstly face the risk of a country broken. So the system in China, the country's status in world production and the global division of labour all force the decision that the government of China must pay attention and devote great efforts to sustainable production and consumption in order for the government avoid such substantial risks.

The mechanisms that China possesses in regards to the economic system is powerful enough to promote and drive Sustainable Consumption. The China Consumer Association led by the Ministry of Commerce with its controlled media is very important and effective to guide the trend of consumption for the whole country. As long as the government has the willingness to promote

²⁵ Source is the same as 19.

²⁶ Source is the same as 19.

sustainable consumption, and if the government has a good enough understanding and rational of sustainable consumption, then it can do well through its social systems.

The channels are enough for the Chinese government to make communication and education on sustainable consumption, but the situation currently is that the government does not pay enough attention to the importance of promoting sustainable consumption.

ii. The government understanding

The government pays more attention to sustainable production than to sustainable consumption. The government has devoted great efforts, technology, funding and strength to the promotion of sustainable production, but sustainable consumption has not aroused the government's concern enough, especially in regards to communication and education. There is still no special government organisation to have clear plan for communication and education on sustainable consumption as little attention has yet to be paid to sustainable consumption.

On one hand, this situation is due the global division of labour because China became the world's factory, but on the other hand it was also in part decided by the China autarchy system because the government maintained control of these systems. The need from people is not considered to be the powerful strength to decide the direction of the market, which is greatly influenced by the policy from the government.

IV. PRACTICE AND IMPLEMENTATION OF EDUCATION FOR SUSTAINABLE CONSUMPTION

A. Assessment of scope of practice

In the practice area, Chinese NGOs have done a significant amount of work. The information in this section was collected first by review of material from the websites of NGOs, and then by interviews with the following NGOs identified in table 5.

i. All of these interviews were very genial

The interviews with NGOs were both pleasant and inspiring. The interviewees were very open to share their knowing and to speak without reserve. Conducting the interviews was very smooth and free of the rigid decorum familiar to other interviewees.

TABLE 5: THE INTERVIEWS OF NGOS IN CHINA

No.	Category	Organisation	Division	Position	Interview date
1	International NGOs	Green Peace	Food program	Pro. manager	17 th August, 2010
2			Forest program	Pro. Manager	17 th August, 2010
3		Forest Stewardship Council(FSC)	Pro. Manager	30 th August, 2010	
4	3 organizations & 4 persons	Institute of Sustainable Community		Assistant of Chief	30 th August, 2010
5	Local NGOs	Shanshui Conservation Center		Director	27 th August, 2010
6	4 organization & 4 persons	Global village	Community program	Pro. Manager	19 th August, 2010
7		Global Environmental Institute	Energy program	Pro. Manager	30 th August, 2010
8		China Youth Climate Action Network(CYCAN)		Pro. Manager	20 th August, 2010

ii. All of the interviewed NGOs developed related work on SCP

All of the interviewed NGOs have done some related work on sustainable production or sustainable consumption, which concentrated on the angle of resource savings and reducing the quantity of consumption. The NGO projects may not always use the label of Education for Sustainable Consumption, but have parallel titles such as green lifestyles²⁷, green consumption style²⁸, LOHAS (lifestyles of health and sustainability) lifestyles²⁹, etc.

iii. The range of NGOs' work touch all links from the areas of production, economy, and consumption

The characters of NGOs vary, and their working areas and target groups are diversified. Some of them like ISC (Institute for Sustainable Community), which is concerned about sustainable production in industrial area³⁰, and like Shanshui Conservation Center, which is concerned about the sustainable production in agriculture and grassland farming area, contribute to Sustainable Production.³¹

Some NGOs like Earth Village, which is concerned about how to guide the consumers' consumption in communities towards the direction of sustainability, contribute to Sustainable Consumption at the community level.³²

Some NGOs like Greenpeace, which promotes the Farm-to-Supermarket Project to guide the trend of SPC, contribute to linking the economy and the market into Sustainable Production and Consumption.³³ Some NGOs like GEI (Global Environmental Institute), which contributed to and facilitated the negotiations on climate change between China and USA, contribute to the policy

²⁷ Interview to NGO in Beijing.

²⁸ Same as the 26th.

²⁹ Same as the 26th.

³⁰ Interview to ISC.

³¹ Interview to Shanshui Conservation Center.

³² Interview to Globe Village.

³³ Interview to Greenpeace.

promotion.³⁴ Some NGOs like CYCAN (China Youth Climate Action Network), which is concerned with how best to spread the green consumption ideal, rational and behavior, contribute to promoting communication with youth at university level.³⁵ On whole, the NGOs' work are very significant, well envisioned and with good effects, however the range of influence of these efforts were all limited in the target group. Furthermore, it is not easy to more widely spread the efforts of these NGOs, even by internet, because the power of NGOs in China is quite limited.

B. Good Practice examples

i. The Farm-to-Supermarket project, initiated by the government and encouraged by Greenpeace China Office³⁶

"In the past two years, a series of projects have been put forward by government. One of the biggest ones, known as "Farm-to-Supermarket", calls for direct connection between supermarkets and agricultural cooperatives. In this way, it is possible to avoid extra transactions among the suppliers. *Why to do this?* Generally, it is profitable for every party. Of course, for the suppliers, it may be adverse. But for the farmers, ensuring such a market means that they can be highly motivated for the production and their interests can be guaranteed. On the other hand, urban consumers can reduce costs to buy food cheaper and fresher. For the retailers, it is also beneficial that costs can be reduced while profit margin increases with a probable increase of 10%. Currently, the Chinese government is promoting this project. Besides the economic incentives, the project also contains other considerations. For example, this project can trace the entire process of production, which makes it possible to check emerging food security easily. Meanwhile, food security can be better defined, not just in the level of research, so this is a good policy strategy. This is relatively consistent with the working direction in Greenpeace which is to establish a more comprehensive management and control system, in order to reduce or avoid the use of chemical fertilizers and to prevent planting transgenic seeds. Thus, Greenpeace agrees with this policy and hope to improve and increase its implementation.

A large proportion of Greenpeace's work focuses on retail markets and consumption practices. Greenpeace, through its staffs' efforts and through consumer participation, aims to promote retailers like supermarkets to play a greater role, as they have strong discourse power in signing the contract with agricultural cooperatives. In the retail process, the supermarkets make demands for the types of products they require and ask the producers to act in accordance with their requests. It would be very effective if the retailers' demands include the need for environmental protection requirements. At the same time, the supermarkets do not want to encounter any problems regarding their retail practices, thus this option for including environmental criteria is also consistent with their basic requirements. Some supermarkets are currently aware of this problem, and are willing to accelerate the investment including funds, manpower and material resources for environmentally friendly production and agricultural practices, but some supermarkets still are slow to act.

³⁴ Interview to Globle Environment Institute.

³⁵ Interview to CYCAN.

³⁶ Interview to Greenpeace.

On the issue of genetically modified (GM) food crops, Greenpeace monitors the market to identify potential GM products. When they identify such products, they discourage the retail of it. This is downstream control, but it usually results in a lot of wastage. In fact, controlling from the source, such as sowing non-GM seeds, is a better approach. When the supermarket knows there are no GM seeds around the farmers' planting area, the supermarket can feel safe and collect them rather than collecting food products of unknown origins, which requires intensive testing to check if they are genetically modified or not. That is why Greenpeace views the establishment of Farm-to-Supermarket supply chains as an important means to motivate change among retailers. They need to be clear what they planted, the planting process, and what they used for sowing. Therefore, what we have been doing is to promote such a mechanism and cropping systems that include environmental knowledge and environmental policies.

The Farm-to-Supermarket project aims to develop an awareness that consumers should pay attention to the production process during their daily purchasing, as well as to support environmental-friendly industries, such as organic agriculture, CFC-free refrigerators, non-disposable chopsticks, which are also related to daily lifestyle practices. Like with organic foods, some consumers currently feel that these products are expensive and not of a good design, thus they are unwilling to support them. But if a family is well-off and able to support such products, Greenpeace appeals to consumers to support this industry. As it is organic and non-genetically modified, it internalizes the environmental cost into the price of the product which can result in higher prices. Suppose you buy a product which pollutes a river or lake, who will pay for the cost of this pollution? The answer is still the consumers. As long as consumers are united to support the development of this industry, the price will decline due to the growth in this economic aspect and we will all benefit in the long run. So, this project pursues consumers' rational thought, and environment education can strengthen this process by addressing real environmental problems and bringing accountability into our daily lifestyle practices.³⁷

ii. "Book lovers for forests" project from Greenpeace

"Book lovers for forests" project was initiated by Greenpeace, and it advocates for consumers to purchase forest products with environmental certification and refuse disposable consumption items to reduce both local and international environmental destruction. This project began by addressing paper usage. It has since initiated a campaign about disposable chopsticks.

The kind of paper used for printing is decided by the publishers. Now, larger publishers have recognized that highly educated people are increasingly concern about environmental issues focusing on the improvement of ecological systems. If a book is printed on 100% recycled paper and reduces carbon dioxide emissions, it would be helpful for marketing of the book. So, publishers are willing to attempt this kind of practice. For certification issues, consumers in China do not have much awareness about the FSC certification, but high-end users have made some efforts on this in regards to ecological construction and the ecological architecture award that concerns about whether the material used is certified and ecologically sound.

Greenpeace wants to engage consumers to support their work, so they deliberately organized some activities to improve public environmental awareness before the Beijing Olympics Games. In 2007,

³⁷ Interview to Greenpeace.

they initiated a campaign about disposable chopsticks, which intended to raise this topic into discussion and to influence the Beijing Organizing Committee for the Olympic Games (BOCOG), the related departments of Beijing government and restaurant operators to realize the environmental issues related to disposable chopsticks. Although disposable chopsticks individually are not a big problem, but when multiplying their usage by the 1.3 billion strong Chinese population, a small problem has become an immense problem due to the extensive usage of disposable chopsticks.

In 2007, Greenpeace conducted a survey on scale of production of disposable chopsticks to obtain some data about wood consumption. They found some vivid statistics, like the total lengths of disposable chopsticks produced in China every day is enough to connect to the moon. In addition, they also tried to communicate with the restaurant owners through telling them the issues behind disposable chopsticks, such as disposable chopsticks contains chemical substances and then persuading them to not use disposable chopsticks in their own restaurants. It was estimated that over 45 billion disposable chopsticks are produced and thrown away every year in China (Shan, 2007). The campaign lasted for half a year and it was quite successful. In Beijing and Guangzhou, there were around 2000 restaurants promising to refrain from the usage of disposable chopsticks.

Following Greenpeace's campaign in 2007, relevant departments also launched related policies. The Beijing Catering Trade Association and three other departments proclaimed that they did not encourage usage of disposable chopsticks. This was followed by a declaration from the Ministry of Commerce and the Bureau of Forestry to not construct any new manufacturing plants for disposable chopsticks. It can be acknowledged that stemming from this Greenpeace campaign, many people in China are now aware of this issue and actions are being taken to reduce the usage of disposable chopsticks. Although disposable chopsticks are not responsible for the country's largest consumption of timber, they are a very important symbolic phenomenon. If this behavior can change, it may help to raise people's overall environmental awareness".³⁸

iii. Establish EHS training certification by ISC(Institute for Sustainable Community) efforts

This is a project of ISC located mainly in Guangdong Province and Jiangsu Province, and the following case evidence is taken from the Guangdong project. The project in Guangdong province mainly cooperates with enterprises on environmental health and safety training in EHS. In 2009, ISC applied to establish a college in cooperation with Sun Yatsen University in Guangdong Province which would be the first on environmental health and safety training in China.

This training project focuses on employees and managers, and it also includes safety assessment for factories. Many suppliers for transnational corporations are lacking corresponding systemic and professional human resources, which makes it hard to meet the environmental safety standards set by transnational corporations. Therefore, there is a huge demand for transnational corporations to develop environmental safety standards for suppliers in order to ensure product quality. Many transnational corporations, such as GE and Wal-Mart, have already financed developing standards for the EHS academy oriented towards managers of their supply companies.

³⁸ Interview to Greenpeace.

Training programmes are divided into elementary, intermediate and advanced levels. The elementary level mainly focuses on basic knowledge of laws and regulations, while the intermediate level is concerned with skills for experienced management. The advanced level focuses on case studies of senior management which is mainly for suppliers and SMEs. By joining this training programme, managers can get a qualification as an EHS manager, which allows them to bring this related knowledge into the suppliers' factories. ISC is now applying for a certification and has already submitted to the Ministry of Human Resources and Social Security. Qualifications will soon be approved, and it is hoped that a certification examination can be developed in the near future".³⁹

C. Participation/Cooperation of Civil Society Organizations and regional cooperation

i. The cooperation between NGOs and the government

There are many cooperation efforts occurring between NGOs and the government in China. To promote related policy is one of the main aims for NGO's cooperation efforts. Like the staff from Greenpeace explained, "it is not possible to clearly say if the situation is one where the NGOs promote the work of the government or if the government works to create opportunities for the NGOs. From the angle of the NGOs, their impression is one of an interactive relationship with the government".⁴⁰ For example, Greenpeace has cooperated with MEP, the State Forestry Administration, Ministry of Agriculture, the China Consumer Association led by Ministry of Commerce, etc. to promote green consumption and environmental certification of forest products⁴¹.

In another example, Shanshui Conservation Center has cooperated with the State Forestry Administration, Ministry of Agriculture, Sichuan Provincial Government, Sichuan Forestry Administration, Qinghai Provincial Government and Qinghai Forestry Administration in order to promote conservation efforts through agreements between local grassroots movements and local governments.⁴²

ii. The Cooperation between Government and NGOs

The cooperation between the government and NGOs holds the government in the leading position. The attitude from the government to the NGO is like its attitude towards foreign corporation, and this depend on whether the specific NGO is helping the government do what it thinks is right and promoting suggestions to guide society in such good direction. Those NGOs that are viewed as good for China's social development and environmental protection in line with the suggestion direction of the government will be encouraged and supported by the government⁴³.

For example, the NDRC cooperated with Earth Village to initiate sustainable development training for government leaders⁴⁴. The State Forestry Administration cooperated with the Forestry Stewardship Council to promote the certification of timber in China and to market products with the FSC label⁴⁵.

³⁹ Interview to ISC.

⁴⁰ Interview to Greenpeace.

⁴¹ Interview to Greenpeace.

⁴² Interview to Shanshui Conservation Center.

⁴³ Interview to National Development and Reform Committee.

⁴⁴ Same as the 41th.

⁴⁵ Interview to FSC.

V. ASSESSMENT OF CURRENT APPROACH TO PROMOTING SUSTAINABLE CONSUMPTION

A. Strengths

i. The strength of the government

The government is sensitive to sustainable consumption and can respond quickly to the calls for action from international society. The government is powerful and has the superiority to make top-down design. The government has power to promote and implement policy and activities that can have a great influence. And the government can ensure the sustainability of policy and its implementation.

ii. The strength of NGOs

NGOs respond quickly to focus on target groups and to concentrate their efforts on practical area and affairs. Their work can often reach deeper than the government's to form their own unique character. NGOs are concerned with the details of project implementation, and their work is sturdy and effective. NGOs do not mind working at a small scale and prefer to implement concrete activities. NGOs also have a strong willingness to cooperate with the government, and can cooperate with them closely.

B. Weakness

i. The government's weakness

Some agencies of the government are only concerned with details and never consider the macro plan or top-down design thus limiting their wider influence. A weak basis for research and decision making restrain their holistic planning, and there is often either no overall design or the top-down plan is insufficient.

Other agencies of the government do not have a good management structure, especially those that have a profit-aimed orientation (as identified by both the government and NGOs), which is not good for its role and its work in the society. The government agencies which focused on the detailed implementation worked only at the surface-level concerned about form and did reach not deeper connection with underlying issues. For this reason, these agencies often have difficulties in cooperating well with local organizations.

The diverse responsibilities of various government agencies can at times restrain the potential for cooperation between these agencies. Inter-Ministerial work often leads to fierce competition among the cooperators. The current cooperation between the government and NGOs would benefit from being increased and strengthened. The current human resource capacity in the government is insufficient on SCP and ESC, but they have no self-awareness of this, which results in the government ignoring the need for capacity building.

ii. NGO's weakness

NGOs in China have a more peripheral status than is the norm in many other countries. The range and strength of the roles that NGOs can take in China are very limited. NGOs often face a lack of funds, limited cooperation with the government, lack of both research basis and decision-making basis, and thus it can be very difficult for them to ensure the continuity of their projects. Pursuing the professional degree and level is a problem for NGOs because of most of the staff members of NGOs do not have such qualification. It is necessary to offer opportunities in continuing education.

C. Overall assessment and findings

- Every organization and all officers agreed that Sustainable Production and Consumption and Education for Sustainable Consumption are very important areas.
- The Chinese government is powerful and has great influence through communication. Inter-Ministerial policies have very significant effects.
- The national government needs to take the leading role to promote SCP and ESC. Currently, MEP has the leading role in the government on both SCP and ESC.
- The strength of MEP to promote sustainable production is substantial, but the difficulties and pressures are also significant. MEP is working very hard in this area on its own.
- The role of the government at all levels is that the central government makes policy and the local government implements it.
- When the local government implements the policy, if the policy is supported from the central government and the funding for implementation is ensured, then the implementation usually occurs smoothly and effectively.
- The problem that is now faced is that when promoting sustainable consumption and ESC, lack of available funding at all levels of government is a key problem because the country has invested almost all of such funds into the area of sustainable production.
- Some organizations in the government are only concerned with concrete details and profit, and they do not put their concerns and energy into policy promotion. The viewpoints and positions of these organizations towards ESC and SCP are misdirected and at times irresponsible.

VI. RECOMMENDATIONS FOR IMPROVING THE PRACTICE OF ESC IN CHINA

A. General practice on ESC

i. Increase the government policy support at all levels

Implementation of Education for Sustainable Consumption needs the support of government at all levels to make good social climate, which will be important for the establishment of sustainable consumption across all areas of society.

ii. Set up special department on EE/ESD in Ministry of Education, strengthen the capacity building to the key implement organization

From the angle of formal education, it is visible that the Ministry of Education has done very proper macro policy work, but the implementation of these policies is not good. This is due to the fact that there is a lack of the important mid-level departments. For example, if the Ministry of Education established a new department as “Division of EE/ESD” or “Section of EE/ESD” or even “EE/ESD Group” responsible for the policy and its implementation on EE/ESD, it would resolve this longstanding problem.

Education for Sustainable Consumption relates directly with humans as a whole and as individual; it concerns broad socio-cultural patterns and it aims at influencing people’s lifestyles and behaviors. So potential capacity building for the implementing organization should be paid special attention because it will influence the effects of the policy implementation. It is necessary to develop and strengthen training, education and curriculum development on Education for Sustainable Consumption and for Sustainable Production in pre-service vocational and technical education. It is one of the key links to capacity building for the whole society.

iii. Ensure the funding support for ESC

Education for Sustainable Consumption is currently neglected in practice. It is an area of education that is significant in achieving social shifts towards a sustainable society, and thus deserves attention. It relates to the education of the entire human species. It is necessary for funding to support these education works in order to deeply change our society towards the direction of sustainable development.

iv. Strengthen multi-stakeholders cooperation on ESC

In the area of Education for Sustainable Consumption, the central government makes policy and macro-level design, the local governments implement, the research institutes offer the basis for decision-making, NGOs help the local government to implement, the business and industrial sectors make sustainable production and circular economy, etc. Thus, multi-stakeholder cooperation is the basis to ensure the impacts and effectiveness of Education for Sustainable Consumption.

v. *Strengthen international cooperation*

Global economic integration has led to the processes of production, economic flows and consumption patterns interactively binding the whole world together. A consumer in any country, no matter what he does, will end up causing environmental influence in the world. That means once the consumers unite together, they can change the models of production and the requirements for sustainable production in the world. This is the strength of the consumers as a whole. The promotion of sustainable development requires international cooperation that actively engages consumer citizenship.

B. Policy opportunities on ESC

i. *Inter-Ministerial cooperation to promote national policy making*

If only the Ministry of Environment Protection alone promotes the policy at the national level, it is not good for SCP and ESC promotion. Inter-Ministerial cooperation is necessary to promote policy at the national level.

ii. *Promote collaborative policy making between Ministries*

The practice shows that policies developed with collaboration between ministries and to encourage role sharing have supported environmental education significantly in China. Regarding SCP and ESC, which are both cross-disciplinary issues, similar development of collaborative policies jointly formed between ministries are very important and useful for the promotion of these topics.

iii. *Strengthen the macro-level plan and design*

The government should make a holistic plan and macro-design for SCP and ESC. This would result in a doubling of the effects with half the efforts.

iv. *Increase capacity building for the government*

Capacity building for the key managers in the government organizations would influence the effects of SCP and ESC and the overall capacity for implementation. Capacity building should not be neglected, and it is especially important to pay attention to improving the capacity for democratic decision-making as one of the contents of awareness raising and capacity building for the government.

v. *Encourage and support research work in order to strengthen the basic support for decision-making*

Good policy making from the government depends on a grounded basis for decision-making. So it is very important to ensure scientific and balanced decision-making through the encouragement and support of relevant research work.

vi. *Develop a feedback mechanism*

Feedback mechanisms are crucial to measure the effects of current work, and it provides a good index and information source to adjust and improve future work. This is a very necessary link for the whole process, and should be given enough attention.

C. Recommendations for improving Chinese capacity for ESC implementation

- 1) Create dialogue and communication among various Ministries to strengthen the common cognition among these government organizations.
- 2) Create transboundary opportunities to promote common social understanding.
- 3) Develop and strengthen the awareness and capacity of the officers to make democratic decision-making. Create the foundations and climate for cooperation with the government in China.
- 4) Encourage and support cooperation among researchers, decision-makers and practitioners. Increase the scientific and rigorous basis for governmental decision-making.
- 5) Widen the training to spread the ideas of SCP and ESC, in order to promote public participation in these matters across all of society.
- 6) Confirm the key departments, organizations, links and priorities in the areas of SCP and ESC, and where required set up new, necessary government departments. Train and educate on these key points in advance to improve the capacity building for the society.
- 7) Prepare systematic work plans to promote SCP and ESC step by step strategically, in order to achieve social sustainable development.

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CHAPTER 3

EDUCATION FOR SUSTAINABLE CONSUMPTION IN JAPAN: *Current policy frameworks, implementation and governmental capacity*

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I. INTRODUCTION

This national case study on Japan's current strategies and capacity of the government to promote sustainable consumer behaviour is based on research conducted by Tokyo City University as a collaborating partner with a study initiated by IGES. The goal of this research is to advance the quality and increase the implementation of Education for Sustainable Consumption in Northeast Asia. "Education for Sustainable Consumption (ESC)" supports the transition towards a low carbon society through the realization of sustainable consumption patterns by directly influencing consumer behaviour. ESC is addressed as a sub-topic of Sustainable Consumption and Production (SCP) which received increased attention during the United Nations Commission on Sustainable Development fourth implementation cycles (meetings 18 and 19) and the efforts on a 10-Year Framework of Programmes (10YFP) for SCP. Regional work is also occurring in Asia and includes activities undertaken by the Asia-Pacific Roundtable on SCP and UN-ESCAP's Green Growth initiative.

Despite a growing international consensus on the importance of SCP, efforts on the promotion of sustainable consumption and ESC are still limited globally. In the Asia-Pacific region, policy efforts on sustainable production are now advanced, but sustainable consumption remains largely unaddressed. Governments are limited in their efforts to promote sustainable consumption by a lack of capacity and understanding on how best to influence consumer behaviour and effectively implement ESC. This research aims to highlight where governmental capacity, policy and strategies for promoting sustainable consumption may be strengthened, in order to better influence consumer behaviour and implement effective Education for Sustainable Consumption in China, Japan and Republic of Korea.

Japan provides an interesting country case study for this report as Japan has been one of the global leaders in promoting green markets both domestically and regionally. Sustainable consumption and production (SCP) policies in the country are well developed. Japan was also a leading country in the implementation of and funding for the United Nations Decade on Education for Sustainable Development. Although these significant efforts are highly noteworthy, it remains the case in Japan as in many other countries in Asia-Pacific that ESC has received little attention at a policy level. The existing frameworks on ESD and SCP though provide a strong opportunity for creating a strong layering of initiatives on ESC if the capacity for such work was developed. To achieve this, Japan will need to move beyond its focus on ESC as education about preventing harm to the consumer and protecting individuals' rights and begin to focus greater on aspects of social and collective responsibility and engendering citizen commitment to sustainable lifestyles.

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II. OVERVIEW OF ESC SURVEY

The study was conducted in two parts. In the first round, an open-ended survey was used to collect responses from a wide variety of actors. Following a review of these surveys, the key actors were identified for participant in the second round of research. This round was based on both structured interviews and open discussions with government officers in national, prefectural, and local governments along with representatives of NGOs. The objectives of these two rounds are explained below.

Objectives of the survey were: (1) to conduct an assessment of current governmental capacity for effective ESC implementation; and (2) to identify pathways for improving overall performance (see Table 6). For the conduction of ESC survey, Questionnaire Survey and Interview Survey were employed. After the distribution of the Questionnaire (see Appendix 2) to the target of this survey, structured interview was implemented based on the Questionnaire. Question items of the Questionnaire were set by IGES, and were translated into Japanese by the Authors, which include: (1) main policies; (2) definitions, criteria, benchmarks; (3) strategy; (4) responsible actors; (5) target actors; (6) target area to be improved; (7) project/programmes; (8) specific measurements of success; (9) strengths/weakness; (10) constraints; (11) ways to encourage public participation; (12) partnership with NPO/NGOs; (13) institutional capacity; and (14) points to be improved for institutional capacity development.

TABLE 6: OBJECTIVES, METHODS AND CONTENTS OF ESC SURVEY

<p>Objectives: - to conduct an assessment of current governmental capacity for effective ESC implementation, - to identify pathways for improving overall performance.</p> <p>Methods: - Questionnaire Survey - Structured interview, open discussion</p> <p>Contents (Question Items):</p> <p>(1) Main policies, (2) definitions, criteria, benchmarks, (3) strategy, (4) responsible actors, (5) target actors, (6) target area to be improved, (7) project / programme, (8) specific measurements of success, (9) strengths / weakness, (10) constrains, (11) ways for encourage public participation, (12) partnership with NPO/NGOs, (13) institutional capacity, (14) points to be improved for institutional capacity development</p>

As for the interview targets, the following interviewees were selected for the conduction of the survey (see Table 7), i.e. (1) Cabinet Office as a main body for the promotion of ESC (including Consumer Agency), (2) Ministry of Economy, Trade and Industry (METI) as a main body for the promotion of Sustainable Consumption and Production (SCP), (3) Ministry of Environment (MOE) as a main body for the implementation of Environmental Policy, (4) Ministry of Education, Culture, Sports and Science and Technology (MEXT) as a main body for the promotion of Environmental Education, (5) Kanagawa Prefectural Government as a leading local authority of environmental treatment, and (6) Yokohama City as the biggest city designated by ordinance.

TABLE 7: INTERVIEW TARGETS FOR ESC SURVEY

N=6 (12 Interviewees)	Personal Details		Interview Date
	Organization (Division)	Position	
Central Gov't 8 Interviewees	[JG1] Cabinet Office (including Consumer Agency)	● Senior Researcher	20 th Jan, 2011
	[JG2] Ministry of Economy, Trade and Industry (METI)	● Director ● Deputy Director ● Section Staff	3 rd Dec, 2010
	[JG3] Ministry of Environment (MOE)	● Deputy Director ● Section Staff	24 th Nov, 2010
	[JG4] Ministry of Ministry of Education, Culture, Sports, Science and Technology (MEXT)	● Director ● Deputy Director	24 th Nov, 2010
Local Gov't 4 Interviewees	[JL1] Kanagawa Prefecture	● Section Chief ● Section Staff	3 rd Dec, 2010
	[JL2] Yokohama City	● Section Chief ● Section Staff	22 nd Nov, 2010

III. EXISTING POLICY FRAMEWORKS ON SUSTAINABLE CONSUMPTION AND PRODUCTION AND EDUCATION FOR SUSTAINABLE CONSUMPTION

A. Policies on SCP

i. Origins of Consumer Education

To understand the current context for ESC in Japan, it is necessary to begin with the development of consumer education in the country and its evolution from an approach based on protecting consumers rights and safety to a focus on encouraging consumer responsibility and preventing negative impacts from their actions. The first wave of consumer education in Japan began in the 1960s with consumer protection administration within various ministries and agencies. From the time the Consumer Strategy Commission was created in 1963, there was someone responsible for consumer education. The basic approach to consumer education (CE) at the time was to solve problems facing consumers. Solving a modern social problem such as consumer issues was an extremely practical idea for social reform. The level to which consumer consciousness and consumer rights could be raised was the key to consumer education; this was based on the idea that consumption was a social reform issue and that the socio-economic structure of mass production, mass circulation and mass disposal was creating the problem. Because of this, becoming aware of one's rights and recognizing the structural nature of modern social problems is the root of consciousness. Awareness of consumer rights became the golden road to solving consumer problems based on a distinctly modern rational educational theory that assumes if a person understands the structure and essence of a problem, that person will increase their awareness for their rights.

The basis of consumer rights theory is a one of consumer vulnerability. Behind this is the mentality that the government should protect the vulnerable. In modern economic society we think of the relationship between corporations and consumers as equal; the premise is that both a purchaser and a seller willingly enter into agreement with equal rights. However, the reality is that manufacturers

have deep knowledge about their product content, production process as well as their strengths and weaknesses, and there are a number of cases arising where consumers are being treated as ignorant. Fair and level interactions are not occurring. The mainstream conception that the consumer protection administration's role is to reduce the number of consumer victims came from these exact types of situations.

ii. Connections between consumer issues and environmental problems: from consumer as victim to consumer as perpetrator

In the 1970s when pollution came to the forefront of societal problems in Japan, it gradually became clear that the use and disposal of products consumers were generating was having a huge impact on the environment, especially the processing and disposal. As a result, the issues facing consumers no longer centered on consumer vulnerability and consumer protection but the issue of consumer environmental ethics emerged. This was a transformation in how we see the consumer. We moved from an era of seeing the consumer as vulnerable and as a victim to an era where the expectation is for individuals to have social and civic responsibility and for environmental protection as the first standard for consumer behavior in a collaborative society, and in which environmental protection is demanded through consumer behavior. In the early 1980s the "Consumers Vote with their Wallets (yens' voter)" campaign questioned consumers about which products they chose and purchased as well as raised questions about civic awareness. For example, we began to see initiatives by consumers attempting to stop environmental destruction by saying no to corporate products that pollute and destroy the environment, such as was the case with the ban on synthetic detergents and water pollution at Lake Biwa. From this example we can see that the primary issue is not with harm to the individual but the problem shifts to an emphasis on consumer behavior and the individual creating no burden whatsoever on the public. If you are thinking about consumer issues with a focus on product defects and flaws, no discussion or debate arises about what consumers choose or purchase. Environmental consumer education is the process of consumers proactively selecting and purchasing items, learning about the basis and standards for selecting and purchasing these products and connecting what they learn to action. Selection value and value standards are both at the foundation of education for sustainable consumption (ESC).

B. ESC aspects in Formal Education Curriculum

Efforts to integrate consumer education within formal education came on the scene in the 1948 text book *Democracy* under the heading "Consumer Protection," which was published by the General Headquarters Ministry of Education (currently the Ministry of Education, Science, Sports and Culture) immediately after the war. Reports on consumer education came out in succession in the 1960s including from the Ministry of International Trade and Industry's (currently the Ministry of Economy, Trade and Industry) Commission on Industrial Structure in 1965 and the Economic Planning Agency's (currently the Cabinet Office) Commission on Citizen Living in 1966. The *Basic Law on Consumer Protection* was enacted in 1968 establishing that, "The national government will take necessary measures such as providing information and disseminating knowledge about products and their services, promoting outreach activities for consumers about life planning, and enrich education related to consumer living in order for citizens to have independence and to carry-on healthy consumer living."

The importance of consumer education in formal education was taken on in a meaningful way in 1986 when the Commission on Citizen Living made a formal request concerning “Consumer Education in Schools” to the Ministry of Education’s Curriculum Council. In 1989 the Ministry of Education announced its new curriculum guidelines that included the enrichment of consumer education.³ In September 1988 the Commission on Citizen Living made a concrete recommendation to support consumer education and on February 23, 1990 the Ministry of Economy, Trade and Industry and the Ministry of Education established the jointly administered National Institute on Consumer Education. The late Economic Planning Agency Director Takahara appointed Dr. Nakahara (one author of this report) to be the institute’s first research director. Thereafter, the Ministry of Education introduced *yutori kyoiku* (a more free/relaxed approach to education) in its revised curriculum guidelines in 1999, which resulted in a decrease in time for consumer education related subjects such as home economics and social studies.⁴ However, in 2003 Dr. Nakahara and others published *Consumer Life* the first Ministry of Education approved text book on consumer education, which included sections on “the environment and consumers” and “sustainable consumption.”

In 2004 the *Basic Law on Consumer Protection* was amended and became the *Basic Consumer Law*. The following year, the Basic Consumer Plan received cabinet approval. In “Basic Direction of Consumer Policy (2) Prepare Foundation for Consumer Independence,” the plan specifies that, “by providing opportunities throughout life for consumer education in various venues—such as at work, for families, in communities, and in schools—all consumers will be able to gain the knowledge necessary to prevent consumer trouble.” The plan also indicates that strengthening the strategy for promoting consumer education is an urgent issue and suggests improving opportunities for receiving consumer education by systematization and through training, support, curriculum development and delivery for the next generation of consumer education professionals.

IV. CURRENT GOVERNMENTAL STRATEGIES FOR PROMOTING SUSTAINABLE CONSUMPTION

A. National level

i. *Consumer Education Administration (Cabinet Office and the Cabinet Office’s Consumer Affairs Agency)*

From the beginning, the Economic Planning Agency (currently the Cabinet Office) – the agency overseeing The *Basic Law on Consumer Protection* – had introduced consumer education as a preventative measure for consumers. Thereafter, along with the collapse of Japan’s bubble economy, responsible consumer behavior was demanded of people through the “Consumers Vote with their Wallets (yens’ voter)” campaign. In other words, awareness as consumer citizens was beginning to sprout. As a result, the Japan Academy of Consumer Education began research towards the introduction of consumer citizenship education. Today consumer education is established and being implemented as adult education at 240 locations throughout Japan but even today there is still a focus on preventing harm to consumers rather than an environmental shift to sustainable consumption. The idea for consolidation of consumer administration that became clear under the

³ *Gakkou ni okeru Shouhisha Kyouiku ni Kansuru Sougou Chousa (Comprehensive Survey on Consumer Education in Schools)*, Shouji Houmu Kenkyuukai, 1989.

⁴ *Gakko ni okeru Shouhisha Kyouiku no Shien Housaku Kenkyu (Support Strategy Research for Consumer Education in Schools)*, National Institute on Consumer Education, 1992.

Fukuda administration became reality on September 1st 2009 with the creation of the Consumer Affairs Agency and the Consumer Commission. As a result of Consumer Affairs Agency related legislation (*Consumer Safety Act, Act to Establish the Consumer Affairs Agency, Proposed Law Related to Preparation for the Law to Implement the Act to Establish the Consumer Affairs Agency*) passing in the Japanese Diet, the agency that had oversight over citizen living and consumer education, formerly the Economic Planning Agency Citizen Living Division, was dissolved.

A new agency of the Cabinet Office, the Consumer Affairs Agency, was initiated in 2009 and following this the consumer education administration was relocated from the general Cabinet Office to be part of this agency. Since 2009, the Cabinet Office's Consumer Affairs Agency Planning Division has been operating a portal site that offers consumer education information in four categories: safety, agreements/negotiations, information and the environment. Each category allows users to search through educational materials, introduce activities, introduce workshop content, and access a game corner, illustration collection or dvd corner. These efforts do not equate to education for sustainable consumption but "environmental objectives" of consumer education are outlined as follows, "individual confirms environmental product information and is able to choose the environmentally friendly product at the stage of purchasing. Treat possessions with care, be aware of the impacts consumer living has on the environment and dispose of things properly when using and throwing products away. Individuals are able to cooperate and participate in environmental conservation related to consumer living and aim for a sustainable society," and the objectives and contents of each of the sphere's (environment) goals have been established as can be seen below (Box 1-3).

BOX 1: LIFE STAGE APPROPRIATE CONTENTS FOR CONSUMER LIVING AS RELATES TO ENVIRONMENTAL CONSERVATION EDUCATION (OBJECTIVE 1)

- Objective 1: Students confirm environmental product information and select environmentally friendly products.
- Early childhood objectives: Students are able to listen to information about the environment such as environmental labels from someone in their immediate surroundings.
 - Early childhood contents: Students know that environmental labels exist and are interested in their basic characteristics.
 - Childhood objectives: Students are able to realize that information such as environmental labels is available on products in their immediate surroundings.
 - Childhood contents: Students realize that environmentally friendly products exist and understand the characteristics of labels
 - Youth objectives: Students understand labels and quality indicators for common products and can choose environmentally friendly products.
 - Youth contents: Students know the meaning and characteristics of different categories and labels for environmentally friendly products and understand the effects and impacts the products have on the environment. They know the environmental initiatives of corporations that provide common products and understand about environmental friendly merchandise.
 - Adult objectives: Adults understand the labels and quality indicators on products they use in daily living and can select environmentally friendly products.
 - Adult contents: Adults understand the meaning of eco labels, green labels, etc. as well as their social significance. Adults understand the importance of proactively purchasing environmentally friendly products when engaging in purchase behavior. Adults understand that it is an organizations social responsibility to choose environmentally friendly products when procuring materials for organizations.
 - Elder adult objectives: Adults are interested in new environmental labels to utilize in choosing products.
 - Elder adult contents: Adults understand the meaning of eco labels, green labels, etc. as well as their social significance. Adults understand the importance of proactively purchasing environmentally friendly products when engaging in purchase behavior.

Reference: URL <http://www.caa.go.jp/kportal/ryouiki/environment03.html#lesson>

BOX 2: LIFE STAGE APPROPRIATE CONTENTS FOR CONSUMER LIVING AS RELATES TO ENVIRONMENTAL CONSERVATION EDUCATION (OBJECTIVE 2)

Objective 2: When using and throwing away products, students treat them with care, are aware of the impacts consumer living has on the environment and dispose of things properly.

- Early childhood objectives: Students can learn how to use and dispose of common things from someone in their immediate surroundings.
- Early childhood contents: Students are interested in energy efficiency, separating trash, and other important environmentally conscious behaviors in daily living.
- Childhood objectives: Students realize the impacts of their consumer living on the environment and can appropriately use and dispose of common products.
- Childhood contents: Students understand the relationship between consumer living and the environment and develop proper habits of use and disposal of products. Students develop environmentally friendly habits in daily living such as using energy efficient products, separating trash and water conservation.
- Youth objectives: Students understand the impacts of their consumer living on the environment and can appropriately use and dispose of common products.
- Youth contents: As students understand the relationship between consumer living and the environment and develop proper habits of use and disposal of products, they also understand their impacts on the environment. Students understand the 3Rs (Reduce, Reuse, Recycle) that are necessary to create a system of sustainable materials. They understand lifecycle assessment.
- Adult objectives: Adults can properly use and dispose of common items in daily living.
- Adult contents: Adults learn about the relationship between consumer living and the environment and understand the impact of the use and disposal of common products on the environment. Adults learn about the principles of the 3Rs (Reduce, Reuse, Recycle) that are necessary to create a system of sustainable materials and develop appropriate waste separation habits. Adults make it a habit to use products for a long time and to take good care of them. Adults understand that they can contribute to environmental protection through energy efficient cooking, kitchen composting, and eating habits.
- Elder adult objectives: Adults are conscious of environmental impacts when using and disposing of products, understand newly established social rules, and appropriately use and dispose of products.
- Elder adult contents: Adults learn about the relationship between consumer living and the environment and understand the impact of the proper use and disposal of products on the environment. Adults are interested in new policies to create a system of sustainable materials and make it a habit to properly separate waste. Adults learn about the impact of the use and disposal of household goods.

Reference: URL <http://www.caa.go.jp/kportal/ryouiki/environment03.html#lesson>

BOX 3: LIFE STAGE APPROPRIATE CONTENT FOR CONSUMER LIVING AS RELATES TO ENVIRONMENTAL CONSERVATION EDUCATION (OBJECTIVE 3)

Objective 3: Confirm environmental product information and select environmentally friendly products when purchasing.

- Learning objectives in Early childhood: Students are able to participate in environmental activities in the community with a parent or guardian.
- Learning contents in Early childhood: Students participate with parents or guardians in community trash collection activities and have interest in environmental conservation activities.
- Learning objectives in Childhood: Students discuss different ways to do environmental conservation activities and can participate in them.
- Learning contents in Childhood: Students are interested in environmental conservation activities in the community. Students develop a habit of participating in areas of environmental conservation activities that they are interested in.
- Learning objectives in Youth age: Students are interested in the relationship between

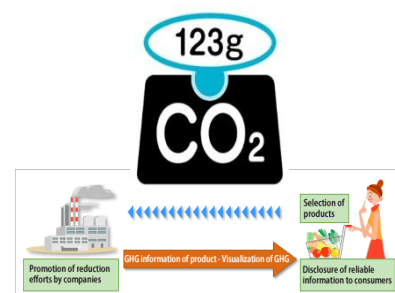
local/international environmental problems and consumer living, and are able to participate and collaborate in related environmental conservation activities.

- Learning contents in Youth age: Students collect information on or experience corporate social and environmental responsibility activities and understand the need for this type of action. Students understand the need for social activities related to local environmental problems. Students develop a habit of participating in activities of areas that they are interested in. Students understand the need for social activities related to environmental problems and the importance of linking to future generations through environmental lectures and volunteer activities.
- Learning objectives in Adult age: Adults will be conscientious of linking with future generations and are able to participate and collaborate in environment related social activities.
- Learning contents in Adult age: Adults understand activities by consumer groups, private companies, not-for-profit organizations, and municipalities to protect the environment for future generations. Adults understand the significance of environmental activities in their communities and decide on their own to participate in an area of interest.
- Learning objectives in Elder adult age: Adults are able to pass on wisdom and ingenuity in daily living that is related to environmental conservation.
- Learning contents in Elder adult age: Adults understand the significance of various environmental activities in their community and make it a habit to participate in an area of interest. Adults make it a habit to share their experiences in social action related to the environment and their eco life experiences with children and younger generations.

Reference: URL <http://www.caa.go.jp/kportal/ryouiki/environment03.html#lesson>

ii. **Environmental Economics and Policy Administration: Sustainable Consumption and Production (METI)**

The Ministry of Economy, Trade and Industry (METI) has made sustainable consumption and production research and the promotion of environmentally friendly products industrial policy. Since immediately after the Rio Summit in 1992, the advancement of eco innovation for environmentally friendly products kicked off as a part of industrial policy. One concrete outcome in 1999 was the Eco Products Exhibit, which helped create a green market for environmentally friendly products and continues to be hosted annually. Today almost 200,000 participants attend the exhibit and represent diverse stakeholders, not just industry. One can imagine the height of interest in the event. Following the Marrakech meeting in 2003, METI started a collaborative project on sustainable consumption with UNEP and is already researching consumer receptivity, which has had a strong influence on the introduction of life cycle assessment (LCA) to the industrial world and contributed greatly to the development and system building for carbon foot printing, which focuses on preventing global warming.



iii. **Environmental Policy Administration (Ministry of the Environment)**

In addition to overseeing the environmental label “Eco Mark,” and having jurisdiction over the *Green Purchasing Law* and the *Green Contract Law*, the Ministry of the Environment implements sustainable consumption and production policy towards the promotion of environmentally friendly products. At the same time, there is a great opportunity to develop sustainable consumption and production through green procurement by leveraging the effort and duties of local municipalities.

iv. Environmental Education Administration (MEXT)

Although the Ministry of Education, Culture, Sports, Science and Technology (MEXT) does not explicitly address education for sustainable consumption (ESC) in educational policy it has become clear that ESC is being developed within environmental education and consumer education, targeting both school education and adult education. In formal education the *National Curriculum Guidelines* establish the implementation of environmental education in elementary and middle school science, social studies, period for integrated learning, etc. We also realized that education for sustainable consumption was taking place in the consumer education as part of high school home economics. However, it is clear that the number of hours allotted to these various classes is extremely limited. On the other hand, we identified that education for sustainable consumption is being advanced for general consumers as adult learners through both consumer education and social education.



In 2009, the MEXT Central Council for Education went through a revision process for home economics in the overall revision to the *National Curriculum Guidelines*. The result of this was described as follows, “In order to promote consumer education and environmental education, we need to improve content necessary to establish lifestyles that aim for a sustainable society, content related to living and economy, and foster the capacity for consumers to act responsibly based on appropriate personal judgment. Especially in ‘Comprehensive Home Economics’ students should understand the relationship between food, shelter and clothing, and the environment, and improvements should be made to enable lifestyles that are conscious of the environment, natural resources and the realities of consumption.” The Guidelines establish the goals for home economics as follows. “Comprehensively address lifelong development and living, create understanding of the significance of family and the relationship between family and society, instill the knowledge and skills necessary for living, and foster the skills and practical attitudes for men and women to collaborate and actively work towards imagining community and family life.” The revisions also emphasized consumer and environmental education, promotion of food education, and dealing with aging combined with diminishing number of children in order to further define the principles of *ikiru chikara* (zest for living). “Acquiring the knowledge and skills necessary for living” was set forth as knowledge and skills about things necessary for daily living such as food, shelter and clothing, family, childcare, consumption, environment, etc. acquired through practical and experiential learning.

At the high school level it is important to build on elementary and middle school learning, take into account both economic perspectives related to daily living and perspectives of passing on and creating lifestyles and develop implementation skills that are based on scientific grounds towards building a sustainable society. The guidelines clearly state that the aim of home economics is not just to make students understand but is to foster practical skills for living a health and environment conscious life and to establish the type of lifestyle that a sustainable society will demand. In high school home economics it is important to build interest in social interactions such as in family and community life and to see this as a subject of lifelong creation. The focus is on awareness of issues and asking, “Why are things the way they are?” or “What should we do?” within the context of aiming to build a sustainable society and reevaluating life from a global perspective.

The section on “establishing the type of lifestyle that a sustainable society will demand,” states, “Create understanding for sustainable consumption by making students aware that various environmental problems such as global warming and depletion of resources and energy are created by our lifestyles based in economic development and mass production, consumption and disposal.” It continues to emphasize, “In order to solve these problems, each individual consumer must reexamine his/her lifestyle and awareness for daily living, and become aware of the importance of rethinking our methods of production and consumption and aiming for a sustainable society.” It also suggests instructors link examples raised in units on eating habits and environment, clothing and environment, and housing and environment (MEXT, 2009).⁵ MEXT made its first assertion about sustainable consumption and shifting towards a sustainable lifestyle in its *National Curriculum Guidelines* as described below in Box 4.

BOX 4: NATIONAL CURRICULUM GUIDELINES' REFERENCES TO SUSTAINABLE CONSUMPTION AND SUSTAINABLE LIFESTYLES

Sustainable Consumption

Make students think about environmentally friendly behavior and how we are actually moving in the opposite direction due to the globalization of the economy, development of the distribution system, mass consumption of cheap products and disposal of over packaged goods. Also, have them think about the environmental impacts of mass consumption of plastics, paper, lumber, etc. from both domestic and international perspectives; give them an understanding of the importance of sustainable consumption and the current state of consumer society with its mass production, consumption and disposal; and have them think about the true meaning of wealth. Make students conscious of corporate initiatives such as the International Organization for Standardization's ISO9000 which focuses on quality management and ISO14001 on environmental management when making purchases, in order to reduce environmental impacts and to ensure safety and peace of mind.

Establishing Environmental Conservation Lifestyles

Make students aware that we have dramatically increased the amount of natural resource consumption and environmental pollution, and are unable to solve environmental problems such as global warming as a result of giving priority to economic development and convenient and comfortable living.

Create the understanding that in order to actualize a rich standard of living with limited natural resources we need to reexamine our mass production, mass consumption, and mass disposal society. Inform students about important life values that families and communities already embrace such as “Think globally, Act locally” as well as the traditional cultural value “mottainai” (literally meaning ‘wasteful’ but the word implies a deep resourcefulness and sense of putting everything to its full use). Enable students to reduce their environmental impact through voluntary consumer behavior, to live a lifestyle that contributes to environmental conservation, and to take action and have a public voice for the environment through purchasing behavior.

Reference: *Home Economics Revision Points*, MEXT, 2009, p.36.

⁵ MEXT (2009) *Home Economics Revision Points*, MEXT

B. Municipal or Prefecture level

i. Kanagawa Prefecture

Located next to Tokyo, Kanagawa Prefecture is recognized as an environmentally progressive prefecture amongst municipalities. The Prefecture received ISO 14001 certification for its environmental management system and continues to implement the PDCA process (Plan, Do, Check, Action). The Prefecture also serves as the administrative body for the Green Purchasing Network (GPN) and has achieved 95% green procurement, which has had great impact on its cities, wards, towns and villages, and has created environmental infrastructure. They have also created their own Agenda 21 which includes climate action policy and waste reduction activities (3Rs). Additionally, they are implementing a program called “My Agenda Project” to cultivate proactive consumers and engaging in outreach activities to create sustainable lifestyles. The “My Agenda Project” targets a multiplier effect by having individuals post environmentally friendly behaviours on a website. Currently 84,000 residents are participating. To measure the success of this program, the prefecture conducted a survey with 5000 people; a little over half of the respondents replied that reducing their environmental impact was good for family finances.

ii. Yokohama City

With a population of 3.4 million, Yokohama City is the largest of Japan’s ordinance-designated cities. A citizen bonded large scale wind power generation project in Yokohama paid itself off in six years, a testament to the high level of environmental awareness amongst the citizenry. On the environmental education front, Yokohama has created its own Yokohama Eco School system, which proactively promotes adult, school and community environmental education. The program has a broad reaching theme so does not focus solely on education for sustainable consumption. The city board of education is very accomplished when it comes to environmental education and expectations are high for creating new linkages between schools and community outreach activities. Yokohama was previously ISO14001 certified but currently only self-certifies due to the high cost of full certification. It is unclear what multiplier effect there has been for green procurement on ward and private schools. However, the not-for-profit organizations Yokohama Global Warming Prevention Council and Yokohama Green Purchasing Network have been launched and there is strong potential for the future development of education for sustainable consumption.



C. General capacity and understandings on promoting sustainable consumption and influencing consumer behaviour

Most global warming countermeasures to date have focused on industry, whether it is energy efficiency in factories or development of energy conservation products. However, nowadays the amount of CO₂ emissions is dramatically increasing due to the amount of energy we use in our homes and the annual increase of automobile fuel consumption related to transport. In order to reduce home and transportation sector energy, consumers need to select and purchase energy saving home appliances and automobiles and improve the way they use these items. In order to

accomplish this, companies must accurately assess consumer needs and develop products that consumers will be receptive to. The Environment Agency (currently the Ministry of the Environment) explored how to promote environmentally friendly products and launched the Eco Mark labelling certification system for environmentally friendly products in 1989. When the Earth Summit was held in Rio de Janeiro in 1992, interest rose for environmental problems, companies proceeded with developing environmentally products but consumers didn't give environmentally friendly products the time of day, even Eco Mark products. There were some issues with product quality and value but the biggest hurdle was low consumer willingness to purchase.

In 1994, under an initiative of the Environment Agency (currently the Ministry of the Environment), preparations began for a sector-wide citizen movement network organization comprised of experts, environmental NPOs, governments, consumer advocacy groups, and corporations that shared an interest in environmentally friendly purchasing. The organization was the Green Procurement Network until September, 1995, when consumer advocacy organizations raised their concerns that "green procurement is difficult for consumers to imagine," and the organization changed its name to the Green Purchasing Network (GPN). GPN's articles of incorporation state, "Green purchasing is the preferential purchase of goods and services that have as little impact on the environment as possible." By 1996 the 73 charter GPN members had grown to 400. In 1998 they exceeded 1000 members; in 2000 they exceed 2000. There are currently 2900 member organizations in GPN that represent over 5 million workers. One reason for the rapid growth of GPN is the fact that it was created as a collaborative organization of consumers and buyers. Initially companies complained, "We can't sell environmentally friendly products even if we make them," and "People won't buy products even if they have the Eco Mark;" no one had ever thought to create a collaborative organization with consumers and buyers even though there were numerous industry associations made up of suppliers.

A second reason for GPN's rapid growth and success is that green purchasing is a "win-win" opportunity for everyone; there are very few people that would oppose it. Consumers partake in environmental friendly activities through daily consumption and reduce costs if they buy environmentally friendly products. Companies that make environmentally friendly products can sell their goods so there is no reason that they should object. The third reason for GPN's rapid growth is that green purchasing is a very concrete economic behaviour. "Protect the global environment" is a very abstract concept to a consumer, but selecting and purchasing an environmentally friendly product is a very specific and common activity. Additionally, for companies, green purchasing is an economic behaviour that links directly with business. Companies don't just need to have moral motivation. Having financial motivation through green purchasing makes the word spread from person to person and through business. The fourth main reason is that GPN was able to overcome the traditional government/consumer stance relationships and create a network that placed both on a level plane as equal consumers. In the context of Japan's Sustainable Consumption and Production, if it were not for the existence of the GPN, the METI's Sustainable Consumption Project and the Eco Mark environmental labeling system would not have happened. Implementing a strategy that links producer's sustainable production with consumer's sustainable consumption is what leads to "sustainable development." Currently GPN is collaborating with the UN, United Nations Environment Programme (UNEP) and others to improve education for sustainable consumption and to contribute to an effective system for advancing sustainable consumption and production.

V. PRACTICE AND IMPLEMENTATION OF EDUCATION FOR SUSTAINABLE CONSUMPTION

A. Assessment of scope of practice

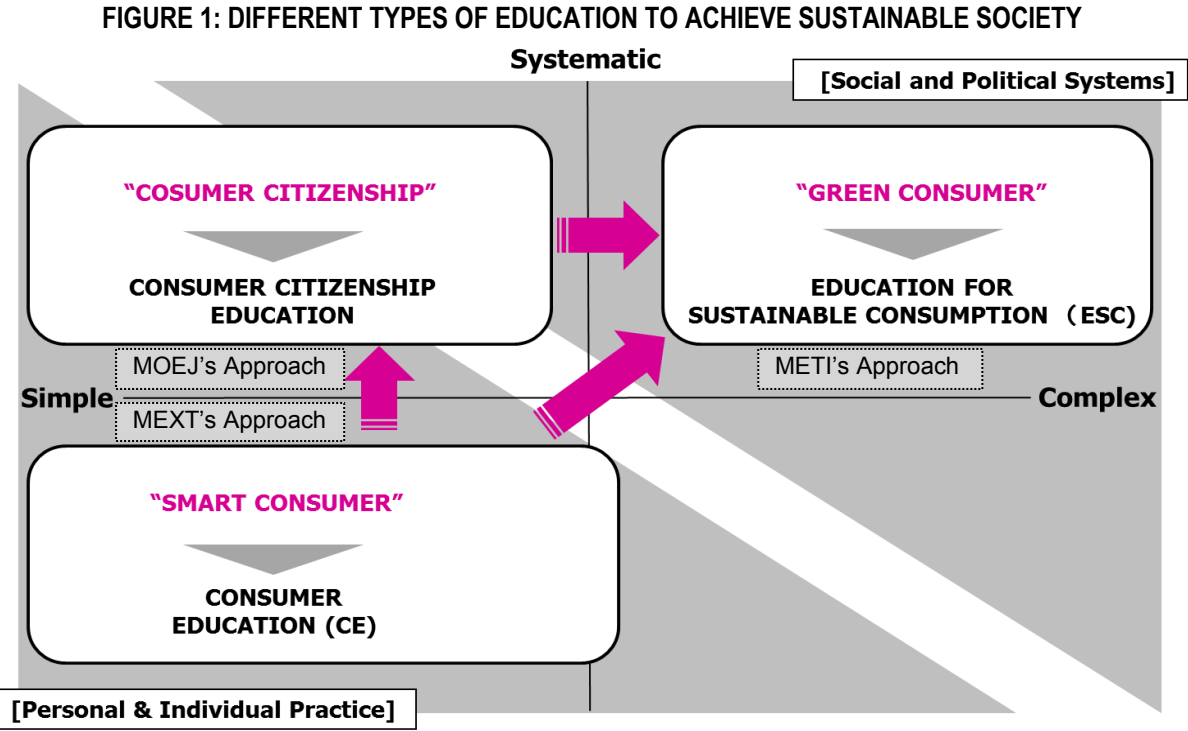
In order to understand Japan's education for sustainable consumption, it is essential to be aware of the goals and target audiences for different types. The social movements that directly targeted solutions to and prevention of Japan's consumer problems, such as the "Give us Rice Movement," started by Osaka housewives during the 1945 post war inflation, and the "Faulty Match Ban Movement," started by a housewives association formed in 1948, marked the beginning of the consumer movement. Mimicking the political argument that sovereignty lies with the people, the consumer movement adopted the philosophical foundation identifying consumers as the sovereign in an economic society and rose up against the growing power of corporations. Generally speaking, if we mention "consumer rights," it means the four consumer rights that President Kennedy presented to the US Congress in 1962, i.e. the right to be safe, the right to be informed, the right to choose freely, and the right to be heard. It was a combination of the post-war consumer movement in Japan and the consumerism movement – marked by the US Consumer Bill of Rights, Ralph Nadar's automobile safety activism, and government, corporate, and not-for-profit activities aiming to protect consumer rights from violations – that lead to education focusing on the "smart consumer." In 1961, one year before the US Consumer Bill of Rights was announced, the Economic Planning Agency (currently the Cabinet Ministry) established the Commission on Improving Citizen Living (amended to Commission on Citizen Living in 1965) and the *Basic Law on Consumer Protection* was enacted in 1968. The law clearly stated the national and regional governments' responsibilities for consumer protection and clarified business owners' responsibilities as well as the role of the consumer. The goal of consumer education training smart consumers was to heighten consumer awareness and consumer rights, but as pollution became more of a social issue in the 1970s, consumer rights began to link into environmental ethics and the creation of value standards around selecting and purchasing goods and services.

As interest in environmental problems heightened during the 1972 UN Conference on the Human Environment, individuals and groups in England began using the term "green consumer" while publishing numerous guidebooks for consumers on how to select products that had minimal impact on the environment and green consumers rapidly gained wide acceptance. Thereafter, environmental labeling that helped consumers select environmentally friendly products and the concept of green consumption spread throughout the world. Founded in 1996, the GPN was a part of this movement that did not simply stop at consumer choice and purchasing, but came to include activities demanding environmental conservation of governments and companies and cooperation for recycling, etc. The target audience for this became known as 'consumer citizens.'

The authors of this article have organized different types of education for sustainable consumption by their target audiences and their objectives in Figure 1. The type of consumer citizenship network often found in Western countries is based on the premise that consumer citizens can be educated through participation and distribution of information and have the ability to create a democratic society.

However, education for sustainable consumption in Japan is still focused on preventing harm to consumers and its main policies are positioned as such; we have to say that Japan's ESC is still

primarily centered on the individual. Yet, it can be said that the creation of today’s political, systematical, and organizational systems offers a grand platform for shifts in citizens’ lifestyles, including individual consumer behavior based on consumer education. Moving forward, there is a need to foster these shifts in citizens’ lifestyles through consumer behavior change programs geared towards individuals but also through consideration for the creation of democratic society as in the consumer citizen networks, consumer citizen education and improvement of social and political systems.

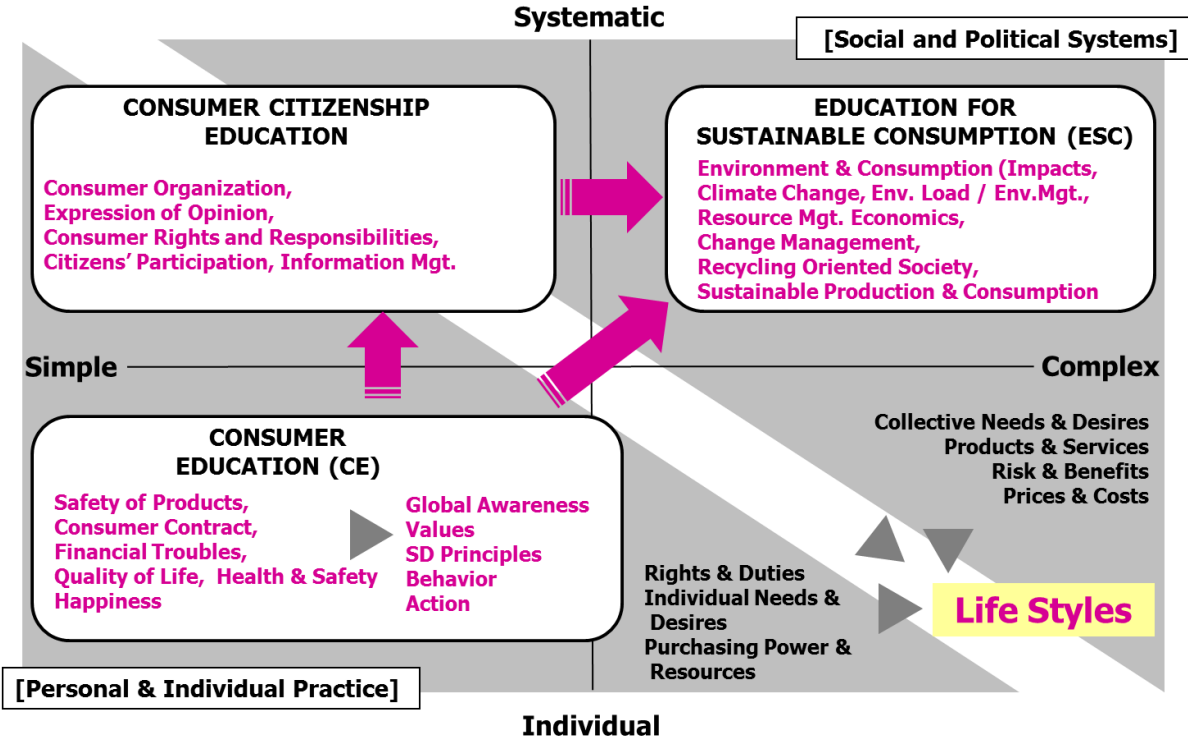


Transforming the values and lifestyles ingrained in materialism cannot be accomplished by merely appealing to individual and family ethics. As long as social status, household independence, and sense of security are upheld by unsustainable consumption it will be impossible. In particular, the life values which determine our lifestyles will not disseminate unless they get out through our social systems. In order to change lifestyles, we can see the positions and customs of post-materialism which doesn’t equate the purchase of material goods with personal happiness. In order to prepare for this kind of social system, it is essential to have a collective spirit of civil society and citizen participation in sustainable projects. A social and political transformation and restoration to the status of the public citizen sector will be indispensable for creating a healthy civil society.

Another very interesting insight that became clear through our survey research with relevant government agencies and ministries is that they are utilizing different functions and roles when promoting education for sustainable consumption. MEXT is promoting a strategy that emphasizes consumer education that aims to improve individual skills and attitudes (quadrant 3), while the Ministry of the Environment tends to promote a strategy of educating consumer citizens (quadrant 2). METI tends to focus on creating the framework for sustainable consumption and production and on implementing program development (quadrant 1). Each of these initiatives is indispensable to

creating lifestyle transformation and each cannot be achieved without synergistic effects with each other. As the lead agency on consumer issues, the Cabinet Ministry was playing the important role of nurturing synergies, but in 2009 with the establishment of the Consumer Affairs Agency and the consequent dissolution of the former Economic Planning Agency Citizen Living Division, insufficiencies in coordination have become apparent. In the future, reviving the Cabinet Ministry's ability to coordinate amongst relevant government ministries and agencies is absolutely imperative to strengthen inter-agency collaboration and improve synergies amongst strategies.

FIGURE 2: DIFFERENT THEME OF EACH EDUCATION



B. Good Practice examples

There are several examples of good practices in Japan's education for sustainable consumption. Good practices under **political infrastructure** include (1) an inter-agency sustainable production and consumption council and (2) a *Green Purchasing Law* and *Green Contract Law* in addition to activities at the local municipal level (green procurement, environmental management). Good practices for **institutionalization** include (1) Various strategies emphasizing the relationships between the environment and the economy such as *Japan's Action Plan for the "United Nations Decade of Education for Sustainable Development,"* (2005), *Becoming a Leading Environmental Nation Strategy in the 21st Century* (2007), *New Growth Strategy* (2010), etc. and; (2) sound legal infrastructure as demonstrated by the *Fundamental Law for Establishing a Sound Material-Cycle Society* (2000), *Law for Enhancing Motivation on Environmental Conservation and Promoting of Environmental Education* (Environmental Conservation and Education Promotion Law) (2003), *Green Contract Law* (2007), *Basic Plan for the Promotion of Education* (2008) and revisions to the *National Curriculum Guidelines*. Above all, the *Fundamental Law for Establishing a Sound Material-Cycle*

Society (2000) was enacted to change our mass production, mass consumption, and mass disposal society and create an economic society that is based on a cyclical system; along with the *Green Consumer Law* this basic law created the basic principles for a sustainable economic society that created a recycling system to deal with waste treatment for home appliances, food, automobiles, construction and packaging. Good practices under **social infrastructure** include (1) qualitative proof and environmental labeling of environmentally friendly products such as through carbon footprinting and eco labels, (2) municipal green procurement initiatives based on *Green Purchase Law* and *Green Contract Law*, (3) business-consumer communication, such as the hosting of Eco Products Exhibition, that respects the significance of sustainable consumption and purchasing, (4) creation of a GPN community network and public database, (5) Cabinet Office information distribution, (6) dissemination and development of environmental education and consumer education materials, and (7) introduction of environmental design to increase receptivity of consumers. The characteristics of good practices for **institutional management** are in the connections between environmental management systems (such as municipal ISO 14001) and green procurement. **Individual and personal good practices** include (1) environmental family bookkeeping and (2) support of local activities.

C. Participation/cooperation of civil society organisations and regional cooperation

If we examine participation and cooperation, the contributions of the GPN are 'very high. GPN started off in 1996 with 73 member organizations. In 2010 GPN had 2303 business members, 240 municipal members, 265 not-for-profit members, totaling 2808 organizations representing over 5 million workers. It is the largest environmental NPO in Japan. Not only does GPN host trainings and make their database available but they also play the role of connecting various stakeholders through environmental education activities and cooperation on the Eco Products Exhibition. In recent years, GPN hosts numerous events in collaboration with local municipalities and citizen organizations. These events including the biannual "5 Million People Action Campaign," "CO₂ Reduction/Plastic Bag Ban Campaign," and "Buy Local Campaign" generally have over 2 million participants and have proven to be very successful. GPN makes green supply chain management possible through municipal green procurement and GPN's role as bridging numerous organizations. Since its inception GPN has given the "Green Purchasing Award." By collecting and evaluating successful practices, GPN is already collaborating and practicing across sectors in sustainable consumption and production. GPN activities will be conducive to creating systems for sustainable consumption and purchasing and should be treated as a driving force.

VI. ASSESSMENT OF CURRENT APPROACH TO PROMOTING SUSTAINABLE CONSUMPTION

A. Strengths

Japan's promotion of sustainable consumption and purchasing is strongest in its legal institutionalization. The contributions of the *Fundamental Law for Establishing a Sound Material-Cycle Society* (2000) and the *Green Contract Law* (2007) have been most profound. In addition to the good practice examples pointed out in this report and the institutionalization documented above, enhanced political (inter-agency council, etc.) and social infrastructure

(qualitative proof and environmental labeling of environmentally friendly products, municipal green procurement initiatives based on *Green Purchase Law* and *Green Contract Law*, etc), along with institutional management (linking with environmental management systems like ISO14001, etc.), and individual and personal good practices (environmental family bookkeeping, etc.) are the strengths of Japan's promotion of sustainable consumption and production. With 240 municipalities participating in seven regional green purchasing networks located from Hokkaido in the North to Kyushu in the South, the Green Purchasing Network that links all of their initiatives is perhaps the biggest strength.

B. Weaknesses

One weakness in Japan's promotion of sustainable consumption and production came with the introduction of the single-seat constituency system which has led to unstable political change between elected officials and has had a large impact on consumer administration. The dissolution of the Citizen Living Division of the Cabinet Office's former Economic Planning Agency (the division responsible for citizen living and consumer education) due to the creation of the Consumer Affairs Agency in 2009 is a typical example of this. Though we have seen examples of consumer education information as a result of establishing the Consumer Affairs Agency, it fails to create inter-agency policies and is lacking in its ability to function as a coordinator. This lack of functioning as a coordinator encourages a compartmentalization amongst agencies and we can see the current state of inconsistencies of policy surrounding sustainable consumption, purchasing and education for sustainable consumption. We believe that the creation of an inter-agency coordination will be conducive to improving Japan's relevant policies.

Also, a further weakness is aging nature of civil society leaders which causes a decline in vibrancy of their activities. Aging of the members of women's consumer organizations particularly weakens the consumer movement as people step away from consumer protection administration, as the elimination of the Citizens Living Council attests.

C. Overall assessment and findings

Creating a multifaceted and linked approach between legal remedies and relevant policies, and deepening dialogue with diverse stakeholders by creating opportunities to communicate will be indispensable for the promotion of sustainable consumption and production in Japan. Should we be revisiting the fact that new opportunities for communication are being generated directly between producers and consumers at events like the Eco Products Exhibition, where there are 200,000 visitors and 6,000 school visitors (including students)? In the future we need to further promote Japan's multi-faceted approach (institutionalization, improving political and social infrastructure, institutional management, and personal and individual good practices) at the same time we need to create new opportunities for communication to deepen dialogue with diverse stakeholders in order to transform lifestyles. Furthermore, sustainable consumption and production is not something that can be achieved by one country alone. Japan is supporting the creation of GPN activities with a focus in Asian countries such as China, Korea, Thailand, Vietnam, Malaysia, and India, and through the International Green Purchasing Networking (IGPN) developing activities advancing an Asian Sustainable Consumption and Production system. Only when we have citizen level, bottom up

activities that link with individual countries' governments' and agencies' top down efforts will we be able to have quality education for sustainable consumption and be able to implement sustainable consumption and production.

VII. RECOMMENDATIONS FOR IMPROVING THE PRACTICE OF ESC IN JAPAN

A. General practice of ESC

Based on the analysis above, recommendations for improving general practices of ESC in Japan include: (1) Increase the outreach, promotion and awareness raising about the importance of consumer education, (2) Raise awareness about the various types of consumer education, (3) Further improve the GPN and its regional networks, (4) Provide support from national and municipal government for GPN and regional network activities, (5) Create effective communication opportunities that maintain the essence of sustainable consumption and production between corporations, municipalities, and consumer networks (continue Eco Products Exhibition and engage different stakeholders), (6) Enhance research on receptivity from a consumer perspective, (7) Increase information sharing and support for individual and personal practice, (8) Participate in knowledge sharing with the International Green Purchasing Network, (9) Interact with GPNs from individual Asian countries, and (10) Develop Asian and global environmental strategies linked to Japan's initiatives for green supply chain management.

B. Policy strategies on ESC

Recommendations for improving policy strategies on ESC in Japan include: (1) Strengthen the coordination between agencies and ministries based on the leadership of the Cabinet Office's Consumer Affairs Agency, (2) Promote efforts and obligation for municipal green procurement based on *Green Purchase Law* and *Green Contract Law*, (3) Establish linkages between municipal green procurement and environmental management systems such as ISO14001, (4) Enhance qualitative proof and environmental labeling of environmentally friendly products, (5) Strengthen relationships with Eco Product Exhibitions in countries throughout Asia and create opportunities for communication with diverse stakeholders, and (6) Strengthen the relationships between environmental education policies in schools, ESD policies, and consumer education policies.

C. Recommendations for improving Japanese capacity for ESC implementation

We propose the following for a comprehensive strategy for education for sustainable consumption. This provides four target actions for the government to focus their ESC efforts on and sets out specific objectives for each action.

BOX 5: COMPREHENSIVE STRATEGY FOR EDUCATION FOR SUSTAINABLE CONSUMPTION (PROPOSAL)

1) Social Consensus and Setting the Stage for a Vision of a Sustainable Society

- Defining and consensus building around sustainable lifestyles and workstyles
- Creating the right environment for family sustainability, the basic social unit
- Creation of proactive citizens in communities

2) Green Consumer Training

- Transformation of values, new theories of happiness
- All-out green procurement and purchasing
- 450,000,000 households in Japan become green consumers

3) Create environmental business market for sustainable production

- Institutionalize eco-design
- Promote green tourism
- Create 100 trillion yen market in Japan

4) Create a fossil fuel free society

- All-out energy conservation
- Switching to carbon neutral and renewable energy sources
- Transformation from energy dependent social structure

CHAPTER 4

EDUCATION FOR SUSTAINABLE CONSUMPTION IN REPUBLIC OF KOREA:

Current policy frameworks, implementation and governmental capacity

So-Young LEE¹ & Jung Hwa KANG²

I. INTRODUCTION

This case study was conducted to assess current Korean governmental capacity for effective Education on Sustainable Consumption (ESC) implementation and to identify pathways for improving overall performance, with an emphasis on individual policy tools and instruments and their effective combination. In this paper the sustainability of consumption is considered broadly in economic, environmental and social terms. To show the empirical evidence of research, in-depth interviews with open-ended questionnaire were carried out with relevant national/local government officers and NGO practitioners. Table 8 shows the details of fifteen interviewees with personal information.

The findings from this research identify the key aspects of the current governmental context for promoting sustainable consumption in the Republic of Korea. It addresses the existing relevant policy frameworks on SCP and ESC; current governmental strategies and capacity for promoting sustainable consumption; practice and implementation of ESC; and assessment of that implementation. Finally, but most importantly, it suggests opportunities for better policy integration and recommendations for improving Korean capacity for ESC implementations.

Recently, Sustainable Consumption (SC) is emerging as an issue, both generally and in Republic of Korea specifically, and it has recently been discussed as a necessary condition for sustained social development. The role of SC as the globalisation process continues to expand worldwide is a key element to drive harmonised economic development and to promote environmentally friendly patterns of consumption. SC can be used as a tool for better quality of life for all through Sustainable Development (SD); to achieve this education is one of the most efficient means for providing citizens with the skills and competencies to become sustainable consumers.

In this respect, especially after 2008 financial crisis, the new government of Korea announced a master plan of the Green Growth National Vision (GG) which takes several important policy steps by launching a new low carbon oriented market and expanding incentives for environmentally-friendly businesses and consumer behaviour. The government identified three strategies and ten policy directions including green revolution in lifestyles for Sustainable Consumption and Production (SCP) in order to implement the GG programs that mainly focus on low-carbon growth and eco-efficiency. Although the GG programs are operational policy initiatives for achieving the goals of the National government's vision, approaches still remained conceptually and systemically oriented solely by

¹ Planning Committee, Consumers Union of Korea/Research Professor, Sociology Department, Korea University

² Secretary General, Consumers Union of Korea

economic rationality and a ‘growth first, clean up later’ mentality. More importantly, education schemes as part of the government’s sustainable consumption program remain under-utilized at present.

TABLE 8: DETAILS OF INTERVIEWS CONDUCTED FOR DATA COLLECTION

N=15	Personal Details		Interview date
	Organization (Division)	Position	
Central Gov't (N=9)	Ministry of Environment (Green Technology & Economy Division)	Director	12 Oct 2010
	Environmental Preservation Association (Affiliated Organization of Ministry of Environment, Public Information & Planning Environmental Education)	Chief Instructor	18 Oct 2010
	Ministry of Education, Science and Technology (National Curriculum Planning Division)	Educational Supervisor	25 Oct 2010
	Ministry of Knowledge Economy (Energy Resource Division)	Director General	25 Oct 2010
	Korea Fair Trade Commission (Consumer Policy Division)	Deputy Director	17 Nov 2010
	Presidential Green Growth Committee (Green Life & Sustainable Development Team)	Director	14 Oct 2010
	Presidential Green Growth Committee (Climate Change Policy)	Director General	14 Oct 2010
	Korea Consumer Agency (Policy Development Team)	Research Fellow	18 Oct 2010
	Korea Consumer Agency (Consumer Policy Research Office)	Senior Researcher	18 Oct 2010
Local Authorities (N=3)	Seoul Metropolitan Government (Environmental Policy Division)	Deputy Director	27 Oct 2010
	Green Citizens' Committee Seoul	Director General	22 Oct 2010
	Seoul Metropolitan Office of Education (Science and Gifted Education Division)	Senior Supervisor	25 Oct 2010
NGOs (N=3)	Green Consumers' Networks in Korea	Director General	11 Oct 2010
	Consumers Korea	Seoul Director	5 Nov 2010
	Green Start Network	Secretary General	10 Nov 2010

II. EXISTING POLICY FRAMEWORKS ON SCP AND ESC IN REPUBLIC OF KOREA (ROK)

A. Understanding Sustainable Development/Sustainable Consumption in ROK

The Brundtland Commission in 1987 defined Sustainable Development (SD) as a development that “meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (WCED 1987: 152) and it covers sectors of economic, social, and environment. The very first mentioning of Sustainable Consumption and Production (SCP)

was at the Earth Summit 1992 in Rio. The well-known Agenda 21 announced that “the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of grave concern, aggravating poverty and imbalances” (UNCED 1993: 8). In the Oslo Symposium, 2 years later, SCP was more clearly defined as “the production and use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations.” (Norwegian Ministry of Environment 1994). To address implementation, UN World Summit on Sustainable Development in 2002 initiated the Marrakech process to develop a 10-Year framework of programmes (10YFP) in support of regional and national initiatives to accelerate the shift towards SCP (the 10YFP was an expected outcome of 19th meeting of the UN Commission on Sustainable Development in May 2011). Hence, the concept of SCP expanded into social, economic, and political principles by promoting “social and economic development within the carrying capacity of ecosystems by addressing and de-linking economic growth and environmental degradation through improving efficiency and sustainability in the use of resources and production processes and reducing resource degradation, pollution and waste” (United Nations, 2002:7).

Taking such principles into account, SC has been defined in more inclusive concepts by UNESCO; it integrates a range of social, economic and political practices at the individual, household, community, business and government levels. SC supports reducing the direct environmental burden of producing, using and disposing goods and services and meeting basic needs for key consumption goods and services, such as food, water, health, education and shelter. SC even supports to maximise opportunities for sustainable livelihoods in the South and contributes positively to the health and well-being of women and children. SC aims to increase the development and adoption of energy and water efficient appliances, public transport and other demand-side measures as well as the production and sale of new goods and services adapted to global environmental constraints. SC can instill lifestyles that place greater value on social cohesion, local traditions and non-material values (www.unesco.org/education/tlsf/TLSF/theme_b/mod09/uncom09t06bod.htm Accessed on 11 Dec 2010).

The Republic of Korea launched a National Vision for Sustainable Development in 2005 which was followed by a National Strategy for SD in 2006. In accordance, a Presidential Commission on Sustainable Development (PCSD) was also established, and the government took policy measures in the areas of SD and SCP. After the 2008 global financial crisis, President Myung-Bak Lee announced a Low Carbon, Green Growth strategy as a new vision to guide the nation’s long-term development. About one year later, on 6 July 2009, the Republic of Korea (ROK) announced a Five-Year Plan for Green Growth (GG) to serve as a medium-term plan for implementing the National Strategy for GG over the period 2009-2013. The Green Growth plan has been launched as a replacement to the SD vision and strategy, and all policies on SCP or ESC are now addressed within the GG vision. The GG programs pledge sustainable development with three key objectives as follows (Presidential Commission on Green Growth (PCGG), 2009):

- Creating new engines of a higher and sustainable growth path by developing low-carbon, environmentally-friendly industries,
- Ensuring climatic and environmental sustainability,
- Contribution to the international negotiations to fight climate change.

According to the project, central government will spend a total of 107 trillion won (US\$83.3 billion), the equivalent of almost 2 percent of the Korean GDP per annum – a relatively high level by OECD standards – for the next five years.

TABLE 9: FISCAL EXPENDITURE ON GREEN GROWTH FOR 2009-2013 (TRILLION KRW, %)

Key Category	Total	2009	2010-11	2012-13
Total	107.4	17.5	48.3	41.6
Mitigation of climate change & energy	56.9	8.6	29.2	19.2
Creating new growth engines	28.6	4.8	10.7	13.1
Improving quality of life & strengthening the status of the country	27.9	5.2	10.5	12.2

Source: The Presidential Committee on Green Growth, 2009b: 22

The Five-Year Plan outlines a set of three strategies and ten policy directions. The three strategies comprise measures for addressing climate change and securing energy independence; the creation of new growth engines; and the improvement of the quality of life. Legislators in Korea have been considering a “Basic Law for Green Growth”, which will provide the legal basis for Korea’s green growth strategy. The planning and formulation of the ROK’s GG strategy and its five-year plan has brought about an inter-agency process that involves all government ministries. The Presidential Committee on Green Growth (PCGG), launched in 2009, is a fundamental institution to set-up and to carry out GG. On December 29, 2009, the Korean National Assembly adopted the Basic Law, which President signed into law on January 13, 2010.

TABLE 10: GREEN GROWTH POLICY

Main strategies	Policy directions
Mitigation of climate change & energy	Effective mitigation of greenhouse gas emissions
	Decrease energy dependence on oil and enhance energy sufficiency
	Support adaptation to climate change impacts
Creating new growth engines	Develop green technologies as future growth engines
	Greening of industry
	Develop cutting-edge industries
	Set up policy infrastructures for green growth
Improving quality of life and strengthening the status of the country	Green city and green transport
	<i>Green revolution in lifestyle</i>
	Enhance national status as a global leader in green growth

Source: The Presidential Committee on Green Growth, 2009a: 53

Korean government believes that the country must continue to pursue greater economic growth than and increase what has been achieved thus far. Hence GG is a model of economic development rather than of sustainability of environment and society called for under the SD model in the previous

decade. Korean government considers that in spite of increasing environmental pressure arising from economic growth, it is only through economic growth that it will be possible to reduce poverty and improve environmental management. Therefore, the challenge is not to limit economic growth but to convert it into an environmentally sustainable form.

In developed countries, among the three pillars of SD, as OECD (2001) mentions, the linkages between economic and social policies are relatively well established. However, in the case of Korea, the current government ignores the achievement of the SD process and instead emphasizes economic policies and their linkages with environmental policies. A government officer at a press conference announced that there was no consideration of the social dimension, which is an important category in SD, but only economic and environment remain in GG.

Beyond its policies at the national level, the ROK is demonstrating engagement and leadership at the international level by boosting global efforts towards achieving a green economy. It is also playing a key role in promoting an East Asia Climate Partnership. However, many critics to the ROK's GG have arisen domestically due to the government's sudden abandonment of SD strategies and plans which included much more consideration on social aspects in comparison to GG.

Additionally, the Four Major Rivers Restoration as a part of the Green New Deal policy – the government's attempt to secure abundant water resources, to create systems for flood control as well as to create opportunities for rural development – has been rejected by and resulted in significant public protest by environmental activists, civil society, academia, and religious leaders due to its negative effects to national budget allocations, people's lives and ecosystems alike. Its lack of ecological sensitiveness and accountability is most problematic. Effective use of environmental and sustainability assessments should be necessitated, given the scale and nature of certain GG projects relating to highly sensitive ecosystems.

B. Policy and Implementation on SC/Green Consumption (GC)

Korean policy makers have sought to foster understanding and awareness of the objectives of the GG strategy among civil society and to induce practice to support those objectives. There are twelve Acts in relation to green issues in ROK that were enacted starting in the late 1970s and intensifying when SD was emphasized in 2000s. Framework Act on Low Carbon Green Growth was added in 2010 due to the current government drive toward GG. SC (or acknowledged as Green Consumption) in ROK has a three-pronged strategy: Green Purchasing, Green Use, and Green Disposal to deliver better implementation. The following table shows development of these various Acts.

TABLE 11: SUMMARY OF PERTINENT LAWS

	Classification			
	Green Purchasing	Green Use	Green Disposal	Others
1970s		Acts on Rationalization Energy Use ('79)		
1990s	Acts on Developing & Supporting Environment Technology ('94)	Acts on Developing Substitute Energy & Promoting Use and Popularization ('97)	<ul style="list-style-type: none"> • Acts on Saving Resources & Promoting Recycling ('92) • Acts on Promoting Conversion to Eco Friendly Industrial Structure ('95) 	
2000s	Acts on Promoting Procurement of Eco Friendly Products ('04)	<ul style="list-style-type: none"> • Acts on Development, Use and Popularization of New and Recycled Energy('04) • Basic Law on Energy ('06) 	Acts on Resources Circulation of Electric & Electronic Products & Automobiles ('07)	<ul style="list-style-type: none"> • Basic Law on Sustainable Growth ('07) • Acts on Promoting Environmental Education ('08) • Framework Act on Low Carbon, Green Growth ('10)

Source: Soon-young Bae et al. 2009: 7

There are nine policies in relation to SC/GC and they can be categorised into three different types, those are; regulatory policy, voluntary collaborated policy i.e. information providing, and economic incentive policy. The voluntary collaborated policies are the most prevalent in numbers such as Eco- Labelling System, Environmental Declaration of Product, Carbon Footprint Labelling, Good Recycled Labelling Program, High Efficiency Appliance Certification Program, E-Standby Program etc. Additionally, more recent SC/GC policies have been leaning towards economic incentive policies such as Carbon Point System and Carbon Cash-back.

Green campaigns are encouraged especially on practice of green lifestyles by the Green Start Network established by the Ministry of Environment (MOE) and WeGreen Network by Ministry of Gender Equality and Family. Green consumer campaigns and movements have been developed by consumer organizations, i.e. Consumers Korea and Green Consumers Network in Korea.³

³ *Post-Script Editor's Note:* Following the completion of the research process for this country case study, the government of Korea launched a new "Basic Plan for Promoting Green Production (2011-2015)". This new policy document provides significant strengthening for the institutional frameworks on ESC. It specifically addresses the addition of education for green consumption and production in school textbooks; the provision of funding to schools to become Green Growth research schools and to develop green growth education programmes, and; the provision of financial support for the Korean Consumer Agency's green consumption programme work with NGOs. It is unfortunate that both the case study and the comparative analysis were completed prior to the launch of this new basic plan in Korea because it is expected that this new policy document will result in improved capacity for ESC implementation, especially in regards to the institutional arrangements and leadership levers.

TABLE 12: SUMMARY OF POLICY & CAMPAIGN FOR GREEN CONSUMPTION PRACTICE

	Green Purchasing	Green Use	Green Disposal	Others
Policy	<ul style="list-style-type: none"> • Eco-Labeling • Environmental Declaration of Product • Carbon Footprint Labelling 	<ul style="list-style-type: none"> • Energy Efficiency Standards & Labelling Program • High Efficiency Appliance Certification Program • E-standby Program 	<ul style="list-style-type: none"> • Good Recycled Labelling Program • Extended Producer Responsibility System 	<ul style="list-style-type: none"> • Carbon Point System
Campaign	<ul style="list-style-type: none"> • Green Living Practice Group • Green Purchasing Leadership Program • Best Green Products Post • Low Carbon Consumption Campaign for Distribution Companies 	<ul style="list-style-type: none"> • Long Underwear Wearing and Coal Briquette Delivering Campaign • Green Transportation Culture Campaign • Energy Saving Campaign through Home Energy Doctor 	<ul style="list-style-type: none"> • Green Mileage Campaign • E-waste Zero Campaign 	<ul style="list-style-type: none"> • Carbon Neutral Campaign • Green Start Carbon Footprint Campaign • WeGreen – Campaign for Writing Eco-housekeeping Book

Source: Soon-young Bae et al. 2009: 8-9

C. ESC aspects in formal education curriculum

The Korean government has presented its GG Vision as an innovative development approach involving a fundamental shift in the country’s growth paradigm, from quantity-oriented fossil-fuel dependent growth to low carbon “qualitative growth” with more emphasis on the use of new and renewable energy resources. The new vision is based on a long-term strategy of green growth up to 2050, which is implemented through Five-Year Plans for GG. As part of GG policy directions, Green revolution in lifestyle aims to promote green growth through regular school curricula and education for adults. More specific indications on education are also guided by Framework Act on Low Carbon and Green Growth.

Green consumption educational programs have been developed that focus on providing information and raising awareness to encourage behavioural change in daily consumption patterns. ROK has considered three main attempts to achieve GG through education. These are to conduct capacity building of human resources, to improve the system for international cooperation, as well as promoting citizens’ awareness of the value and importance of GG.

BOX 6: THE ARTICLE 59 OF THE FRAMEWORK ACT CLEARLY SHOWS THIS AS FOLLOWING

1. The Government shall ensure that industrial entities and citizens can participate voluntarily in policies and activities for low carbon, green growth and that they can practice green life culture in their daily lives by expanding education and public relations activities for low carbon, green growth.

2. The Government shall strengthen school education for low carbon, green growth by developing textbooks and teaching materials including curriculum books and training teaching staff so that citizens can get used to practice of green life from the early childhood and also strengthen educational courses integrated with and linked to general education programs, occupational education programs, basic lifelong education programs.

The main trends for expanding the delivery of Environment Education (EE) began in 2005 by the Ministry of Environment's (MOE) promulgation of the National Environment Master Plan (2006-2015) and its goal and vision described as achieving a sustainable society with both healthy natural environment and livelihoods in the Korean peninsula for the 21st century. In 2006, the government developed the Master Plan of Environmental Education Development (2006-2015) which contains four categories of specified goals. Its vision was to achieve sustainable society through education and practice with the goals: to take a long-term vision of environmental education, a creative environmental education toward unpredictable conditions, environmental education as an innovative engine and, finally, as an international cooperative initiative. In 2008, the Environmental Education Promotion Act was enacted by National Assembly; thus it became an obligation that the government must review the master plan every 5 years. The objectives of the Act were to set up requirements for the promotion of environmental education in order to activate it and to effectively contribute to the sustainable development of the nation and communities by finding a balance between human society and nature. In 2009 the Framework Act on Green Growth legislated local governments and regional education offices to consider the strategy for both environmental education and green growth education in the region.

It is necessary to emphasise green education through professional materials as well as hands-on learning through school pilot schemes and green cultural lifestyle experiences. Previous educational activities focussed on ESD and consumer awareness raising for SC have now been incorporated into the government's vision on Education for Green Growth (EGG). To compare with previous educational paradigm simply focused on the protection of nature and environmental education, EGG has adopted the idea that economic development has no harm to environment when green technologies become the new growth engine. And it encourages students to be green future leaders who continue practice in daily basis.

For these reasons, central government, especially Ministry of Education, Science and Technology, have developed the conceptual framework of EGG and mentioned main issue of EGG strategies as the following:

- Raising people's awareness on green growth: to understand that there is no conflict between environmental protection and economic growth and the importance of green growth toward a greener future;
- Leading the practice of green lifestyle: to practice 'me first, right now' to provide meaningful actions for greener living in people's daily lives;
- Preparing for the green growth future society: training for conducting of future human

- resources through vitalizing green technology;
- Responding actively to global issues, i.e. climate change and participation as a leading nation.

BOX 7: COMPARISON OF ENVIRONMENTAL EDUCATION VS. GREEN GROWTH EDUCATION

	Environmental Education	Green growth education
Concept & Goal	Education for promoting sustainable development by a balance of human society and nature & Practice in daily life	Education for No conflict between economic growth and environmental protection for green future & Practice in daily life & Global initiative
Scope	Regional and national	National and global

Source: MEST, 2009: 3

According to recent government research data, it indicates that the preferences of students to take environment courses are low. A number of factors have influenced this issue, but the priority reason is due to the current educational circumstance which emphasizes only the high scores for national college entrance examinations. In school, students prefer preparing for the key subjects of the exam rather than the environmental curriculum, and also few remaining environmental classes were often misused as the subsidy for other key subject classes.

BOX 8: SELECTION OF ENVIRONMENT RELATED SUBJECT AT SCHOOL

<u>Middle school 'Environment' (2008)</u>	<u>High school 'Ecology & Environment' (2008)</u>
257 schools (8.4%), 59,278 students (3%)	498 schools (37%), 142,654 students (10%)

Source: MEST 2009:6

Secondly, the lack of teaching staff and also their insufficient expertise are constraints which need full attention. As the table shows, the number of teacher's with no certification on environmental coursework are high in comparison with others.

TABLE 13: ENVIRONMENTAL EDUCATION TEACHERS' QUALIFICATION

Classification	Total	Environmental Education Teachers			
		Major in environment education	Major in other subject	Certification in environment teaching program	No certification
Total	2,883	126	85	688	1,984
Middle school	611	37	27	262	285
High school	2,272	89	58	426	1,699

Source: Seoul Education Research & Information Institute 2010: 24

Thirdly, another common constraint is the lack of adequate and relevant teaching materials and an insufficient number and quality of proper training programs for teachers.

The government runs the Green School project promotion and supports the remodelling and renovation of school buildings into environmentally friendly learning environments. In 2009, fifty-two schools were selected (with 196 billion KRW in support) and renovations were with eco-friendly construction. Further, from 1999 to 2009, schools' forest programs to provide green space for students were carried out as a part of environmental education and activities in a total of 810 schools. The government has also emphasised curricula revision and promoted school pilot schemes for indoor/outdoor experimental learning programs related to GG. Between 2009 and 2011, forty-seven schools were selected to carry out school pilot schemes and received 940 million KRW financial support. To promote and achieve a green campus, multiple stakeholders established the Korean Association for Green Campus Initiative. The association and universities joined together to perform sustainable education and research. They are developing university programs to reduce energy consumption and greenhouse gas emissions. To reach a wider citizen base in order to effectively address green growth issues, a sub-group of government and NGOs has implemented informal environmental education through projects and programs. In 2009, various ecological outdoor programs run by MOE and Regional Environmental Development Centre were held regionally throughout ROK and around a thousand people participated in the program.

According to citizens' attitude and awareness on green growth and environmental education from research conducted (2009) by MOE, most respondents answered that education is a useful tools to understand and solve environmental problems. Yet, 58.3% of respondents pointed out that the environmental coursework and relevant information is insufficient. To promote successful environmental sustainability, they also pointed out the need for adaptable 'experimental' learning programs in schools. The research provided further information on the priority task for the government to promote ESC in school including: government active support and willingness to achieve GG (85.8%), fostering environmental education in school (52.6%), active role of mass media (45.4%), and activation of civic organizations (15.5%).

III. CURRENT GOVERNMENTAL STRATEGIES FOR PROMOTING SC

A. General capacity and understandings on promoting sustainable consumption and influencing consumer behaviour

It is a fundamental and important issue to gain a clear understanding on the specific definitions for SC that are understood by the main stakeholders of government officers and NGOs representatives who actively work on ESC. The findings in this section are based on the interviews conducted with both government and NGO officers and reflect the current knowledge capacity they have in relation to ESC and the promotion of SC. The general understanding on the definitions of SC showed an intermediate level of awareness by responding with very general ideas on green consumption. Some interviewees that answered the definition of SC even confessed that they looked up the Basic Law on Sustainable Development before the interview began. They explained that this was because 1) the current national governmental strategy puts much more attention on GG than SD

which had been emphasized by the previous government administration and considered up until GG was launched by the current administration. Hence, the meanings of GG and SD have still not been clearly defined as general concepts; 2) in ROK, as one of the developing countries⁴, the concept of SD which includes social dimensions as well as well-being of nature is a much broader and ideal target for practice in daily lives. Green consumption which narrowed its implementation to economic and environmental dimensions is more practical and implementable in ROK.

National governmental officers focused on Purchasing of Green Products, Saving Energy, and Recycling as ways for practicing SC. They suggested SC would be possible when current laws, i.e. Act on the Promotion of the Purchase of Environmentally-friendly Products and other related policies, are successful in spreading the idea of green consumption to governmental organizations as well as civil society. They replied the definition of SC/GC was influenced, improved by and fused with other country cases and various organizations' attempt to improve the interpretation of the definition. They replied Korean government tends to adopt policy and programs of Japan and European Union countries, for example, 'Cool Earth 50' in Japan and Greenhouse gas reduction policy in the United Kingdom.

Local Authority – here the specific case is the capital city Seoul which is governed as a designated Special City and thus at the Provincial Administrative Level – officers also explained green lifestyles and GC based on Act on the Promotion of the Purchase of Environmentally-friendly Products, Seoul municipal ordinance, and the Framework Act on Low Carbon Green Growth (Declared 2010.4.14). GC implies reducing green house gas emissions as well as energy and resource inputs. The concept of green lifestyles promotes awareness of the seriousness of climate change and to minimise green house gas emissions by saving energy in daily lives. In the case of Seoul Metropolitan Government (SMG), on the basis of Act on the Promotion of the Purchase of Environmentally-friendly Products, all officers are obligated to purchase environmentally-friendly products.

Practitioners in NGOs demonstrated clearer understanding of SD and SC and provided more in depth explanations. They described sustainability as a new pattern of resource use that aimed to meet human needs while preserving the environment so that these needs could be met not only in the present, but also for generations to come. They emphasized the current problem of mass-consumption and modern lifestyles. This is not just a problem of consumption but of lifestyle patterns itself; therefore, alternative sustainable lifestyles are urgently needed. To do so, Green Consumer Network in Korea (GCNK) has proposed to work for green city consumers by attempting to solve environmental problems in the market system rather than escaping from the cities to establish radical alternative lifestyles in rural areas which only a limited number of people will ever be able to achieve in the modern world. Environmental issues must be solved in the present market system and fully depends on environmentally and ethically green consumption to achieve this. Both, Green Consumer Network in Korea and Consumers Korea (CK) have been considering global issues since the late 1990s such as SD rather than just national-level consumer campaigns. They have contributed to broadening the Korean civil society and NGOs' world view.

⁴ Although by international standards ROK has reached the criteria of a developed country, the popular feeling in Korea is that the country is still in a developing status and thus people still prioritize the need for growth over sustainable development.

The answers for the question “who are viewed as the main actors with responsibility for achieving sustainable development” are diverse depending on interviewees’ occupation. When the actors were categorized into ‘National Government’, ‘Local Government’, ‘Citizens/Consumer’, ‘Industry/Business’, ‘NGOs/Civil Society’, most governmental officers in charge of actual policy making emphasized the importance of all actors. Some of them even criticized the unnecessary division of actors in this way under the current world when co-operation among all actors is now expected as the norm. However, to the question of the highest responsible actor, they put ‘National Government’ as the most responsible one to systemize, especially, GG which is just introduced. In contrast, practitioners who have been implementing ESC in NGOs and civil organizations pointed out the importance of ‘Government’ and ‘Industry/Business’ in terms of budget and financial support and appropriate policy making. At the same time, they put the most important role in practice on ‘Civil Society’. Many of interviewees mentioned the urgent need of a transformation of consciousness towards a sustainable society for real practice in daily living prior to the construction of policy or system. They also claimed to establish governance (not government) of all actors or stakeholders of SC/GC for better communication. It is noticeable that the Green Consumer Network mentioned that:

“As the Korean society achieved more democracy, citizens are able to become members of national assembly as well as local authority. And recently as CSR (Corporate of Social Responsibility) became top priority in Korean business, many CSR of business practiced with NGOs. That is, the stable boundary between citizen and government, business/industry and consumers has been blurred. What remains in the end to achieve SD is philosophy. And to lead SD with its philosophy, civil society and NGO should be the highest responsible actor.”

There are different strategies to promote SC between each ministry depending on their own role and responsibility. Ministry of Environment (MOE) enforced the Act on Obligational Purchase of Environmentally-friendly Products, especially across the governmental sector since 2005. It aims to expand citizens’ green consumption in the future when purchasing eco-products in governmental sector has been mainstreamed and is perpetuated in success. It encouraged the promulgation of the Basic Plan on the Promotion of the Green Consumption which was eventually established on December 2010.

Environmental Preservation Association (EPA), an affiliated Organization of MOE, started two different green education strategies. One project is to provide school students ‘Visiting Education’ on big vehicles including green consumption and shopping and also green educational contents and materials which are still in high demand from most of schools. The other is, in order to encourage civil society awareness on SC, they have offered eco-friendly free-gift in every national event they have organized.

Ministry of Knowledge Economy (MKE) tried to lead citizens to voluntarily participate in energy savings by establishing Green Energy Family project. It encourages citizens’ participation by offering incentives. The main strategy of the Korea Fair Trade Commission (KFTC) for promoting SC is to offer correct information to consumers in the field of Labelling, Advertisement, and Consumer Deception that they originally covered; moreover, in this case, they focus more on green products and businesses. They tightened regulations on misleading information of green products and also produced information comparing different green products so as to educate consumers.

Producing Eco-labelled products and publicizing their information through media were nominated as one of the main policies which has shaped the government's efforts on promoting SC and consumers' awareness. The other new policy or strategy which shows government efforts identified by many interviewees is to launch pan-national action networks such as MOE's Green Start Network, Ministry of Gender Equality and Family's We-green, Ministry of Knowledge and Economy's Green Energy Family Network, Ministry of Public Administration and Security's Green New-town.

Beyond central government agencies, there are efforts to promote GG at the local level. Local governments in the ROK are currently developing their respective five-year plans on GG, which would translate the national plan into local implementation. Local authorities are able to establish green growth projects to the needs and priorities of their constituencies through such plans. Seoul Metropolitan Government, as the best example, focuses on distribution and consumption of environmentally-friendly products as the main strategies for promoting SC. They also autonomously published and distributed teaching materials to schools.

IV. PRACTICE AND IMPLEMENTATION OF ESC

Among national government agencies, different strategies to promote SC/GC by each ministry exist depends on its own role and responsibility. Existing programs or projects each government department is implementing to promote SC and responsible consumer behaviour have begun recently, and the interviewees replied that their departments or institutions do the best to implement GG vision although the contents are still insufficient. They show little statistical indicators of impact because its performance has a short history. Also, as Presidential Committee on Green Growth (PCGG) argued, SD or SC, due to their characters, are not easy to review via quantifiable assessments. Nonetheless, interviewees from each ministry, department, and committee replied they will try to evaluate the result of their project and capacity in the future.

The projects that MOE carries out are adopting and promoting the Act on the Promotion of the Purchase of Environmentally-friendly Products to the governmental sector by the Act on Obligational Purchase of Environmentally-friendly Products and to enterprises and individual consumers by voluntary purchase of green products. It plans to promote the Basic Plan on the Promotion of the Green Consumption by the end of 2010. Environmental Preservation Association, MOE's practical sub-organisation for education is in the process of producing children's animation for green consumption which will be free for all on the website. Since 2004, they run 'Visiting Education' with four converted vehicles and providing education to 36,000 elementary school students per year. Korea Fair Trade Commission distributed the booklet "Green Life Guide Line" to local government and NGOs as one of the consumer education projects. It also runs a green lifestyle model house in Korea Consumer Agency. Especially, Korea Consumer Agency has achieved system improvement and consumer participation through program combination: research, education, testing, and cooperation with private organizations. Environmental Preservation Association runs various environment education programs for children thanks to a high demand for EE as well as government budget.

Several projects managed by Seoul Metropolitan Office of Education are interesting. They have offered financial support to fifty school environmental groups which are out-of-formal education programs. They also designated eight environmental education model schools and initiated a

teachers training, an eco-training, an experience program etc. Seoul Metropolitan Government targeted expanding environmentally-friendly products in distribution and consumption. In March 2009, Environmentally-friendly Product Manufacture Association and Emart – one of the biggest superstore in ROK – made a partnership agreement for the promotion of green products. There is now a given special sale space for green products in Emart and the officers from the Association are explaining about the green products directly to the consumers face-to-face. Many consumers self-evaluated that their awareness on green products has increased, according to Deputy Director of Environmental Policy Division in Seoul Metropolitan Government. The role of Seoul Metropolitan Government is to offer administrative supporting for the agreement. This new green product sale space in Emart opened in August 2010. Moreover, they opened the Eco-mileage webpage to encourage households to save energy, water, and gas since 2009 and, according to Deputy Director, they achieved 320,000 household participants in the Eco-mileage program among 3,230,000 household in Seoul. This program offers incentives i.e. environmentally-friendly product coupon and planting trees when households reach to save more than 10% of their use.

Programs and projects by NGOs are very successful in terms of promoting SC and raising consumer awareness and have been expanded at local level to various citizen groups. For example, Green Citizens' Committee Seoul (GCCS) runs a project to support the creation of local communities appropriate for Seoul citizens to take action to tackle global environmental problems. In comparison to the government, NGOs put more attention to general citizens' education and locally based projects. These programs and projects are very active. Green Consumer Network in Korea emphasized SC in all of their education programs and projects i.e. 'Eco-Creative Centre' for students and 'Green Academy' for citizens. Consumer Korea runs 'Greening Super' project which evaluates supermarkets' efforts on environmentally-friendly product sales and conducts campaigns for purchasing green products which show food-miles and carbon footprint. Green Start Network (GSN) runs a program educating citizens to be Green Leaders for each citizen become a local leader for green society and practice in daily lives. They also campaign for energy saving by consulting each household with an energy consultant named Home Doctor.

The understanding of the relationship between the government and NGOs/civil society on promoting SC is various, and the differences are enormous depending on who the subject is. Most of the interviewees representing Government insisted on their positive relationship with NGOs and civil society; whereas NGOs argued that the relationship worsened under the current Korean government.

Here are the opinions from the national governments. Ministry of Environment showed a highly positive evaluation for the partnerships they have with NGOs. MOE state they have received much help from NGOs: ideas, know-how, network etc. Ministry of Knowledge Economy collaborated with civil society organisations and NGOs through the energy saving project. They organized the Green Energy Family Network to promote green consumption, and it supports project investment for local NGOs' activity to promote green consumption culture. Korea Fair Trade Commission now offers financial support for selected NGOs rather than commissioning projects as done previously. They are collaborating on green product comparison projects with four different consumer organisations. Other ministries also insist they maintain close partnerships with NGOs and civil organisations thorough voluntary education. In order to go beyond the limits of the educational promotion, according to PCGG, international partnership would be necessary to highlight attractive issues on GC in similar way to the Global Pink Ribbon campaign for breast cancer.

Engaging the private sector and civil society as stakeholders or partners is a fundamental condition to achieving the GG vision. Civil society organisations in the ROK were active participants in the debate on SD by voicing their concerns and contributing to implementation of SD concepts. This engagement was possible in the Presidential Commission on Sustainable Development (PCSD) established in 2000; however, since Presidential Commission on Green Growth (PCGG) launched, Green Citizens Committee Seoul is the only remaining agency as the part of PCSD and acts to take part in the democratic governance process. Green Citizens Committee Seoul is very special in terms of their performance. It actually runs as cooperative governance among three main stakeholder groups: Seoul Metropolitan Government, the Korea Chamber of Commerce and Industry, and NGOs; and supports the project for SC.

Current partnerships of Seoul Metropolitan Government with NGOs mainly aim at providing supporting subsidy for projects. NGOs feel no deep connection with the current national administration which agreed on a free-trade agreement with United States in spite of citizens' condemnation and huge candle light protest. Present government believes NGOs had an influence on citizens' protest against the government decision. Instead of partnership with existing NGOs, the government established its own civil organisations to practice SC/GC as a part of GG strategies. These organisations are however tightly structured with little autonomy. Green Consumer Network in Korea believes SC is not a political agenda but a lifestyle itself; therefore, they still received 60% of their budget from the government, especially MOE. However, the current government is different from previous ones in terms of communication and mutual understanding. The partnership under the current government is only for contract implementation without negotiation or reflection of the contractor.

V. OVERALL ASSESSMENT OF CURRENT APPROACH TO PROMOTING SC

Governmental officers evaluated the projects and programs on SC as an overall success although they themselves pointed out the special character of SD which means not only to purchase eco-products but to change lifestyle in more sustainable ways that the latter is difficult to assess quantitatively. In contrast, NGOs argued that they face a shortage of financial and systematic support in order to carry out SC programs and projects.

First of all, national government officers pointed out the high motivation of the current government on GG is the most important success factor for the implementation of ESC. It was possible to receive budget allocation from the National Assembly and to cooperate with private organizations including NGOs thanks to governmental willingness toward GG. There are still high demands on information and materials for green education thanks to government force, but not enough support has made as of yet. It is an undeniable truth that current national government's GG strategy effected to provide more green education supply. Seoul Metropolitan Government emphasized their success on Eco-mileage thanks to advertisement, public relations, media and local community government. In addition, the evaluation on local governments' achievement on Eco-mileage made them compete with each other on encouraging citizens to practice green consumption. NGOs pointed out that civil leaders encouraging other citizens to practice green lifestyles was the main success factor.

Here are the results of each interviewee's overall assessment of the current Korean government approach to promote SC. One of the main organizations to implement SC is MOE and they mentioned about the Act on Obligational Purchase of Environmentally-friendly Products in the governmental sector which was their main strategy to spread SC. They acknowledged that there obviously was the limit of purchase on environmentally-friendly products only within governmental organizations. The government started obligatory purchase on eco-products for the governmental sectors so as to encourage eco-business that had not previously established due to the shortage of demand; however, now it is appropriate to expand more eco-consumption to civil sector as the basis of eco-business is now developed. Properly informed and aware consumers would be important partners in promoting the potential of environmental markets and presenting the importance of the environment as a business opportunity. However, lack of citizens' awareness and participation in SC is still identified as one of the main constrains for the successful implementation of ESC.

Environmental Preservation Association, as MOE's educational sub-organisation in practice, believes institutional capacity of organisations and national government to promote SC/GG is currently sufficient but is difficult to drive towards while the Korean education perspective continues to only emphasize high grades in the major subjects. Although environmental education was adopted within National Curriculum, it has low selection rate as just an optional subject. Critical shortage in relation to development of trained teachers as well as officers in charge of ESC is another main constraint. They also claimed that a further problem for the successful implementation of ESC is that programs and projects were not implemented with support from voluntary citizens' participant but rather by governmental officers' obligatory intention and were not maintained consistently.

Korean Fair Trade Commission and Consumer Agency attempt to follow up on the activities initiated by other governmental agencies on SC. However, different interests toward GG crossing diverse governmental departments are mentioned as one of the constraints. If GG related projects which were planned under the different ministries were integrated in ways that focused policy direction and provision of financial support, they would be implemented in more effective manners. They suggested the urgent need of clarifying the main organisations for effective policy execution and opinion collecting. Korea Consumer Agency especially argued SC/GC policy is needed to encourage ESC to be absorbed in all education as a lifestyle education rather than independent ESC subject itself.

Presidential Committee on Green Growth supports the governmental strategy on green lifestyle revolution. Education for GG is a dominant theme of the government and mostly focused on providing information about how individuals/households can save energy by buying green/eco-products for individuals to reduce green house gas emission. However, it is all still at the beginning stages of development, as they honestly replied. The inter-agency process led by the Presidential Committee on Green Growth is an innovative approach to planning that seeks better coordination of policy-making among ministries so that investment decisions are guided by multi-sectoral processes. However, its fundamental role as the focal point of the GG is not practiced properly. The innovative approach to planning better coordination of policy-making and governance was already practiced and a 10-Year plan was produced by the Presidential Committee on Sustainable Development. Unfortunately, the efforts of the PCSD have been ignored by the current government, while the launch of the new Presidential Committee on Green Growth replacing the previous PCSD is not fully welcomed by the majority of NGOs.

Despite injecting 2 percent of GDP on GG by 2013, the concept and awareness of GG or SC is still not clear to the public, and the top-down strategies from the central government, especially Four Major Rivers Restoration project, without communication with stakeholders and participant civil society remains a limit to communicate these concepts. Strong willingness on GG of the national government mismatches NGOs and local government approach on SC, and what has made the situation worse is the lack of communication to support mutual understanding, as acknowledged by interviewees from NGOs and Green Citizens' Committee Seoul. The lack of collaboration between government and NGOs must be overcome. Indeed, NGOs have developed a diversity of pilot projects for SC and ESD. The results of the projects could be used as experimental pilot projects and tested prior to national implementation of ESC under GG vision for the effective implementation of ESC; however, under the new GG vision there has been eagerness to create brand new practice.

Local government and NGOs said their capacity as well as National Government, i.e. MOE, are extremely limited due to the shortage of human resources and financial support. Representatives of NGOs argued that expanding SC is difficult under the current national administration which has no philosophy or experience in governance and sustainable society. The approach to GG should include the concept of SD which contains the pursuit of citizen's well-being rather than conventional approaches to green consumption. In addition, education itself needs to be sustainable rather than one-off events and fragmented campaigns. A lack of a long term blue print for EE is also another big challenge.

VI. RECOMMENDATIONS FOR IMPROVING THE PRACTICE OF ESC IN THE REPUBLIC OF KOREA

It was recognized that it is necessary to increase the capacity of governments to plan and implement effective ESC, and several recommendations were formulated from each department in detail on how best to achieve this. MOE has the main status as government agency working towards SC; however, as an officer in MOE argued, it has a severe shortage of human resources – only three persons at the moment. It needs to have a special team or officers in charge of SC or ESC and also requires enormous help from NGOs to implement GG vision in more effective ways. Human capacity building for government officers to promote ESC is urgently recommended. Ministry of Knowledge Economy mentioned more development of energy saving programs which can be absorbed in daily lives of citizens in order to reach the improved and sustainable energy consumption culture that has been modelled by the most progressive developed countries. Korea Fair Trade Commission has offered plenty of support for green technology development but has not yet attempted this for green consumption apart from campaigns or events. It is their role to observe business and industry for consumer rights, and they suggest government should focus on improvement of policy and system for SC rather than on raising consumer's awareness, which has been well dealt with by NGOs and will be better improved by civil organizations.

One of the NGOs' suggestions is to develop governance which supports lateral partnership and cooperation to encourage public participation rather than top-down governance and to avoid one-off activities run by the national government. NGOs expect to strengthen linkages between national policies and local level implementation and also between top-down and bottom-up approaches. Civil society could play an important role as a proactive partner of the government in promoting the

Green Growth paradigm. In particular, NGOs and consumer organizations could play a leading role in moving citizens and consumers towards eco-efficiency and sustainable consumption patterns because a change in the consumption patterns and lifestyles of consumers can be effectively promoted only when the initiatives come from the citizens and consumers themselves. To lead a role in introducing new regulations and policies, it is important to secure the acceptance of the people.

In many cases, it is civil society that pressures government and the private sector to improve the quality of life and of the environment. Increasing demand for improved quality of the environment and life is the basis for the environmental market and private sector innovations. When there has been development on SC in civil society, it is better for government to integrate with these approaches rather than to create their own new policies and strategies. The ROK should further promote a process of broad-based dialogue and consultation with a cross-section of all stakeholders, especially civil organisations which have developed ESC for last decade in order to generate public support that could prove to be essential for the success of GG. In addition, governments are required to lay down transparent, credible policies and measures designed to encourage the concept and system of GG, as recommended by the interviewed researcher in Korea Consumer Agency.

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CHAPTER 5

ASSESSING CAPACITY FOR ESC IMPLEMENTATION: *A comparative analysis of three country case studies*

Robert J. DIDHAM¹

I. FRAMEWORK FOR CAPACITY ASSESSMENT

The previous chapters have provided important country case studies from P. R. China, Japan, and Republic of Korea looking at the institutional structures and governmental capacities for initiating education and sustainable consumption programmes and integrating these efforts into the wider policies and structures for sustainable development, especially ESD and SCP. All three country case studies demonstrated strong foundations for the promotion of sustainable consumption by the governments of these countries, though it also became apparent that there are many opportunities to strengthen ESC implementation and better integrate policies and programmes to maximise impact. This chapter will provide a comparative analysis of the three country case studies to identify common policy recommendations for strengthening ESC implementation. The analysis of these cases will be done as a capacity assessment of the three governments' current approach and efforts of ESC. By conducting a capacity assessment, it is possible to identify clear opportunities for capacity building in terms of institutions, human resources, knowledge and process.

The framework for the capacity assessment is based on the work of the United Nations Development Programme's (UNDP). UNDP's current strategy is focused on providing capacity development to strengthen the foundations for effective and continued development efforts. As part of this strategy, UNDP has refined a capacity development approach that is structured around five steps. These steps are: 1) engage stakeholders on capacity development, 2) assess capacity assets and needs, 3) formulate a capacity development response, 4) implement the response, and 5) evaluate capacity development (UNDP, 2010: 5).

This research will utilise the capacity assessment framework that formulates step two of UNDP's capacity development approach. It must be acknowledged though that the overall approach developed by UNDP is much more thorough and extensive than will be applied for structuring the comparative analysis in this work. The methodology applied for the capacity assessment by UNDP includes three distinct dimensions of investigation: 1) points of entry (enabling environment, the organisational, and the individual), 2) core issues or levers of change, and 3) functional and technical capacity (UNDP, 2008: 2). The levers of change will provide the main framework for analysis in this work and are identified by UNDP as 1) institutional arrangements, 2) leadership, 3) knowledge, and 4) accountability (see table 14 for additional criteria of each leverage point) (UNDP, 2010: 7-13). Furthermore, this research is influenced by the understanding that governments can play a significant role in influencing consumer choice/behaviour through a comprehensive approach to ESC and the promotion of responsible lifestyles by:

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- Providing an understanding of the environmental imperative;
- Empowering individuals to be actors in protecting the environment;
- Explaining the importance of sustainable consumption within this imperative;
- Developing a supportive social infrastructure for sustainable consumption practices.

TABLE 14: COMPONENTS OF CAPACITY ASSESSMENT FRAMEWORK

Levers of Change: Capacity Development Core Issues & Responses			
INSTITUTIONAL ARRANGEMENTS	LEADERSHIP	KNOWLEDGE	ACCOUNTABILITY
<ul style="list-style-type: none"> • Streamlined processes • Clear definition of roles and responsibilities • Merit-based appraisal mechanism • Coordination mechanism 	<ul style="list-style-type: none"> • Clearly formulated vision • Communication standards • Management tools • Outreach mechanism 	<ul style="list-style-type: none"> • Research supply and demand linkage mechanism • Brain gain and retention strategies • Knowledge sharing tools and mechanism 	<ul style="list-style-type: none"> • Audit systems and practice standards • Participatory planning mechanism • Stakeholder feedback mechanism

Source: UNDP. (2010) *Supporting Capacity Development: The UNDP Approach*. New York: UNDP.

Institutional Arrangements provide leverage points that are relevant across most aspects of public sector management, governance and development activities as it addresses the policies and procedures that are in place to functionalise political mandates and development objectives. Inefficiencies in institutional arrangements are often identified during capacity assessments due to the fact that optimal procedural structures in terms of efficiency and impact are often unacknowledged especially as new procedures and programmes are developed without incorporation or cohesion with previously existing arrangements. This is especially common when intra-ministerial and multi-agency work is examined (UNDP, 2008: 11). “Some of the most common challenges in institutional architecture pertain to lack of coordination among ministries, the absence of a common M&E framework across government, lack of clarity and demarcation of mandates, and lack of consolidated human resource management frameworks and guidelines” (UNDP, 2010: 8).

Leadership as a lever of change has different natures depending on if addressing individual or organisational levels. Effective leadership can extend beyond an individual-to-individual level though and become an organisational capacity that helps to advance a vision-driven agenda and strategic planning. Capacities for leadership can be enhanced by strengthening organisational abilities in vision setting, systems thinking, risk assessment and management and through establishing collective management systems that encourage active and experiential learning (UNDP, 2008: 12 and UNDP, 2010: 9).

“Knowledge is the foundation of capacity” (UNDP, 2010: 10). This is of course why the first pillar of the four pillars learning outlined by Delors (1996) in *Learning: The treasure within* is the pillar “Learning to Know” is about mastering the tools and methods to continue the acquisition as a lifelong learner. At an organisational level, knowledge development is about improving expertise and organisational learning strategies. Knowledge capacity can be strengthened through professional training, experience sharing and knowledge management systems in the organisations. At a social level, knowledge capacity is often best addressed through reforming formal education systems to

ensure that younger generations will have the skills and know-how to deal with current and emerging challenges. The link between social and organisational levels can be developed through ensuring that higher education is corresponding to desired skills and technical competencies desired by the professional sector (UNDP, 2008: 12 and UNDP, 2010: 10).

Accountability is an important lever of change within the organisational sector as it provides oversight, monitoring and evaluation to ensure that procedures and programmes are achieving their desired objectives, and when this is not the case it provides a mechanism to identify short-comings and overcoming obstacles. Furthermore, systems can also be established to provide for public accountability and transparency to ensure that governments are reaching the needs of their citizens which can lead to an additional benefit of encouraging mutual engagement in development activities. Accountability capacities can be improved through strengthening mechanisms for individuals to voice opinions (especially through civic literacy and education programmes), open access to information, ensuring robust monitoring and evaluation systems including both internal and external/independent systems, and by active integration of learning from M&E into future endeavours (UNDP, 2008: 12 and UNDP, 2010: 11).

II. ESC STRATEGIES IN CHINA²

The national government of China identified four main themes they intend to address in their efforts on SCP: 1) Energy Saving and Emissions Reduction, 2) Conservation-oriented Society, 3) Low Carbon society, and 4) Tax Preference. The Ministry of Environmental Protection (MEP) in China is one of the leading government agencies to place high priority on promoting sustainable consumption through advocating green lifestyles in both formal and non-formal education – starting policy efforts in this area in 2004. Although many policy efforts have aimed at sustainable production and promoting green markets in China, the number of policies specifically related to sustainable consumption is limited. Only four national governmental agencies were identified as enacting specific policies for promoting consumer awareness and ESC. These agencies are MEP, the National Development and Reform Commission, the China Consumer Association, and the State Forestry Administration.

Four important findings were made from the review of ESC strategies and policies in China:

- 1) Education for Sustainable Consumption has not been regarded as a priority issue and is not given significant attention.
- 2) Inter-Ministrial co-operation on sustainable consumption and ESC has not received enough concern or regard as an important issue to be addressed by the central government.
- 3) Current approaches concentrate on only a few major commodity items such as cars.
- 4) Communication for public awareness on SCP is not currently emphasised in policy. Though other policies are enacted in regards to SCP, the State does not make use of these opportunities to promote public awareness on these activities.

² Information on China comes from IGES contracted research conducted by Dr. Qing TIAN of the Environmental Education Centre at Beijing Normal Education.

III. ESC STRATEGIES IN JAPAN³

The national government of Japan has set in place several strong policies for institutionalising several sustainable consumption practices including the *Fundamental Law for Establishing a Sound Material-Cycle Society* (2000), the *Green Purchasing Law* (2000) and the *Green Contract Law* (2007). These policies have aimed at developing infrastructures for sustainable consumption and transitioning the practices of public bodies to provide leadership and model best practice in sustainable consumption. In 2010, the newly formed Consumer Affairs Agency initiated an inter-agency council on SCP to identify opportunities for better coordination of SCP strategies and policies across ministries.

In formal education, ESC is addressed in terms of consumer education based on protecting the individual's rights and preventing harm. This approach does not address prevailing socio-cultural factors of consumption, nor does it connect with aspects of ESD taught as environmental education in the natural sciences. The Japanese government enjoys strong cooperation with civil society organisations to promote and encourage participation in various campaigns for SCP. Although these efforts have led to a very high literacy on issues such as energy efficiency and 3R's for a sound material cycle, these practices – much like the government's approach to SCP policies – remains compartmentalised and disjunctured. The review of ESC strategies and policies in Japan concluded that: 1) there is a need to deepen the dialogue with multi-stakeholders on the country's approach to SCP and transitioning towards sustainable lifestyles, and 2) there is a need for better integration between the various approaches taken by government agencies on promoting sustainable consumption (which hopefully will be achieved with the activities of the new inter-agency SCP council).

IV. ESC STRATEGIES IN REPUBLIC OF KOREA⁴

The national government of the Republic of Korea enacted a *Five-Year Plan for Green Growth* in 2009. This plan sets out the main framework under which SCP and ESC are currently addressed in the country. During the 1990s and 2000s, the government launched several acts addressing energy efficiency, resource savings, recycling, green procurement and environmental education. There have been several initiatives and campaigns corresponding with these acts to disseminate good practices to the public. However, the shift towards green growth has led to a decrease in prioritisation and understanding by the government on both sustainable development and sustainable consumption.

The lack of a clear vision for the government's approach to sustainable consumption and ESC under the *Plan for Green Growth* has resulted in limited coordination of policy efforts between ministries and also limited defining of the roles of various ministries in promoting sustainable consumption. This includes a severe shortage of human resources dedicated to efforts on ESC. The government's approach to ESC is further challenged by a lack of multi-stakeholder dialogue and cooperation in this area. However, there are clear signs that better coordination and improved capacity across the

³ Information on Japan comes from IGES contracted research conducted by Dr. Masahisa SATO and Prof. Hideki NAKAHARA of the Faculty of Environmental & Information Studies at Tokyo City University.

⁴ Information on Republic of Korea comes from IGES contracted research conducted by Dr. So-Young LEE and Dr. Jung Hwa KANG of the Consumers Union of Korea.

national government, local government, civil society and NGOs could achieve significant results as clear desires and motivation for achieving more sustainable lifestyles are apparent across numerous actors and the public.

V. ASSESSMENT OF CURRENT CAPACITY FOR IMPLEMENTING ESC IN NE ASIA

A comparative analysis was conducted as an assessment of the current governmental capacities for implementing effective education for sustainable consumption in China, Japan, and the Republic of Korea and utilised the leavers of change from UNDP's capacity assessment framework. A ranking scale was prepared as follows: 0 = no identified examples; 1 = existing examples, but not mainstreamed across system; 2 = existing examples and identifiable achievements/impacts, and; 3 = mainstreamed across system and high achievements/impacts. The sub-components of the four levers of change were investigated based on the three country case studies, also from additional information collected during the "East Asia Workshop on ESC and Promoting Sustainable Lifestyles" (see proceedings: Didham, 2010), and through subsequent discussions with the authors of the country case studies (see IGES, 2011). Each sub-component received a score based on the above criteria (for leavers A. Institutional Arrangements and B. Leadership the maximum score is 12; and for leavers C. Knowledge and D. Accountability the maximum score is 9). Following this ranking, a sum total score was calculated for each lever of change (the total maximum score for the capacity assessment is 42). Though the ranking provides a comparable, quantified score, the issuance of such score is based on a qualitative assessment of the available information at hand.

It is important to explain the significance of these scores and how to interpret the results. The establishment of this assessment framework and scoring was established based on a very ideal model of potential ESC implementation. In this manner, a 100% score for the entire assessment would be extremely difficult to achieve. For countries like Japan, China and Republic of Korea that have only relatively recently started focusing on ESC, scoring a 2 in each category is praise worthy and even a 1 shows good initiation. Since the highest score for each subcomponent is a 3, achieving this is akin to 100% capacity in this category, however this requires not only good practice but also full mainstreaming across the political system which in turn would likely require substantial inter-ministerial cooperation, thus receiving a 100% capacity rating would require ESC to be a very high priority in the government. It is possible to also link capacity rating values to receiving an average score of 1 (with existing examples of practice in all categories) to an overall capacity rating of 33% and an average score of 2 (with both examples and identifiable impacts in all categories) to an overall capacity rating of 66%. Furthermore, the benefit of this analysis is to identify areas where there are opportunities for improving capacity thus the assessment framework is designed specifically to draw out existing gaps in current capacity. Also, the scoring is non-incremental so it is not possible to make statements about countries' relative positions in relation to one another.

A. Institutional Arrangements

Under the lever of institutional arrangements both China and Japan scored a 5 and Korea scored a 4 out of a potential score of 12. It is noteworthy that Japan due to the recent initiation of an inter-agency council for SCP has made improvements in its capacity and is expected to make more as achievements and impacts of these new examples become apparent. On the other hand, Korea's institutional arrangements have actually decreased in the past three years since the institutionalisation of the country's Green Growth strategy. The Green Growth strategy brings significant scoring for a clearly formulated vision under the leadership lever, but in terms of this lever both roles and responsibilities have been left unclear since the initiation of the new strategy and the process has lost some streamlining as many of the previous institutional arrangements that existed as part of the country's Presidential Committee on Sustainable Development were removed and abandoned when it was replaced with the Presidential Committee on Green Growth.

It could be argued that all three governments have streamlined processes for SCP and promoting green markets, but this is not the case for ESC. Although, China's efforts in greening formal education institutions and Japan's efforts in regards to reducing household energy consumption both demonstrate very successful procedures. Korea has improved coordination under its vision for green growth, but improvements in the areas of management and communication need to be made for processes to become organised and roles defined.

The lack of defined roles/responsibilities and a coordination mechanism are the institutional areas that have hindered the progress to-date in all three countries. Part of the reason for this is the inter-ministerial nature of where ESC fits into existing mandates on sustainable development, ESD and SCP. Because many of these mandates exist in various ministries within each of these countries, it is very difficult to define the roles on ESC as they apply to activities in multiple policy areas and multiple ministries. The improvement of coordination mechanisms not just for ESC, but rather for framing and mapping the wider sustainable development agendas and activities, could greatly help to identify those areas where educational activities are need and also where they can be coupled with other policy instruments including economic incentives, regulations, information provision and cooperative agreements to increase dissemination of the concepts, policies and desired learning outcomes. In general, the impact of ESC initiatives can be greatly strengthened when it is coupled with the usage of other types of policy instruments, thus coordination of educational instruments into other SD and SCP areas is an important process to heighten the capacity of institutional arrangements.

TABLE 15: INSTITUTIONAL ARRANGEMENTS ON EDUCATION FOR SUSTAINABLE CONSUMPTION

<i>Components of Institutional Arrangements</i>	China	Japan	Korea⁽¹⁾
Streamlined processes⁽²⁾	2	2	1
Clear definition of roles and responsibilities	0	1⁽³⁾	0
Merit-based appraisal mechanism	2	1	1
Coordination mechanism	1	1⁽⁴⁾	2
Total Score for Institutional Arrangements	5	5	4
Scale: 0 – no identified examples; 1 – existing examples, but not mainstreamed across system; 2 – existing examples and identifiable achievements/impacts; 3 – mainstreamed across system and high achievements/impacts.			

Notes

- 1 When the Korean government institutionalised “Green Growth” in 2009, several of the existing institutional arrangements for sustainable development were lost. In 2008, the institutional arrangements for ESC would have received a higher capacity assessment ranking.
- 2 All three countries have streamlined processes in regards to SCP and green market promotion that have mainstreamed and achieve high-level impacts (rank 3). However, these processes have not been extended to ESC at the same level.
- 3 Due to the recent initiation of the Inter-Agency Council on SCP in 2010, the defining of roles and responsibilities has started to improve. It is only recently that existing examples are identifiable though.
- 4 As above, the Inter-Agency Council has strengthened the coordination mechanism. Though specific impacts were not yet identifiable, this area is improving and it is expected that they will soon be apparent.

B. Leadership

Under the core issue of leadership Japan scored a 7, China scored a 6 and Korea scored a 5 out of a total potential score of 12. However, it was Korea that scored the highest for the subcomponent of a clearly formulated vision, and China that scored the highest for having good communication standards. While Japan has not achieved full points in any single subcomponent, it showed the most balanced capacity assessment for this lever and is the only case to have existing examples for all four sub-components.

China has a noteworthy strength in researching and piloting projects on ESC, developing specific communication standards, and sharing these tools and mechanisms for wider implementation. Thus, many of China’s projects are modelled on replicating good practice blue-prints. This approach means that the Chinese government does implement broad practical-oriented programs, but it is also faced with the challenge of reaching a real depth and character with these projects since they do not always correspond to a clearly defined vision.

The Republic of Korea, on the other hand, now has a clearly formulated vision in their *Plan for Green Growth*, but due to the lack of well-established communication standards and outreach mechanisms this vision has yet to substantially influence policy approaches. Furthermore, there remains a lack of clear understanding of this agenda. Capacity building efforts to strengthen the other subcomponents

of this lever could better support the dissemination of the green growth vision and ensure its proper management.

Japan has been limited in this area due to the lack of inter-agency communication to manage responsibilities towards wider objectives, to coordinate cross-ministerial cooperation, and to share experiences and lessons learned. In fact, Japan’s ministries are often more likely to share knowledge internationally with parallel ministries in other countries than they are to share with other ministries domestically. This communication barrier and lack of knowledge sharing tools will hopefully be something that the efforts of the Inter-Agency Council on SCP will alleviate, but currently it remains a hindrance to successful ESC implementation in Japan. One of the objectives for the Inter-Agency Council could be to promote better cross-ministerial coordination, communication and knowledge sharing as this could substantially help to improve policy linkages and synergies across the sustainable consumption and sustainable development activities of multiple ministries.

TABLE 16: LEADERSHIP ON EDUCATION FOR SUSTAINABLE CONSUMPTION

<i>Components of Leadership</i>	China	Japan	Korea
Clearly formulated vision	1	2	3
Communication standards	3	1	0
Management tools	0	2	1
Outreach mechanism	2	2	1
Total Score for Leadership	6	7	5
Scale: 0 – no identified examples; 1 – existing examples, but not mainstreamed across system; 2 – existing examples and identifiable achievements/impacts; 3 – mainstreamed across system and high achievements/impacts.			

C. Knowledge

The total possible score for the knowledge lever was 9. For this lever, Japan scored a 5, China a 4, and Korea a 3. None of the countries had achieved the mainstreaming of any of the sub-components of this lever. Korea has the potential of improving significantly under the knowledge lever over the next few years as it was clear that the country has initiated several new projects and agencies for knowledge generation and dissemination on green growth, but as of yet it was not possible to identify clear impacts from these new initiatives. Japan is strong in many aspects of the knowledge lever and has several good approaches to link supply and demand for knowledge development. As the different Japanese ministries have their own subsidiary research institutes, in general the research supply and demand linkage is fully mainstreamed in the country but since ESC is challenged by a lack of inter-ministerial coordination it has made it harder for this system to appropriately address ESC research needs. China, as mentioned before, does very good work on piloting innovative projects and disseminating blue-print models, and in this way they do create a

good knowledge supply and demand systems aimed at establishing practical interventions. This approach has both its benefits and disadvantages though; as a drawback, this approach does not create very good knowledge retention nor does it develop a progressive knowledge generation strategy.

Addressing knowledge sharing tools, it is important to distinguish two aspects. The first form of knowledge sharing is to ensure that the best information and research is being input to the decision and policy making processes. This is actually the area where all three countries are stronger. The second form of knowledge sharing is the provision of essential information to the public on sustainable consumption practices and lifestyle/behavioural responses for a low-carbon, sustainable society. To one extent this does occur, but only at the simplest level in terms of promoting a single sustainable consumption choice or promoting an energy efficient product over another less efficient one. At a more complex level of providing knowledge and tools for people to understand how lifestyle patterns can be adapted to accommodate new changes to support more sustainable societies, this is not really generated or promoted by any of the countries. In part, this can be linked to the fact that governments are reluctant to advocate single lifestyle options or ways of behaving; this is due to a fear of being criticised that the government is limiting people’s free will and determination. Nonetheless, this challenge of supporting people in their self-chosen efforts to move towards a more sustainable lifestyle is also hindered because this type of knowledge support for the general public is usually ignored in the government’s research supply and demand efforts as they view this process as mainly supporting policy decision making efforts.

TABLE 17: KNOWLEDGE ON EDUCATION FOR SUSTAINABLE CONSUMPTION

<i>Components of Knowledge</i>	China	Japan	Korea
Research Supply & Demand Linkage Mechanism	2	2	1
Brain Gain and Retention Strategies	0	2	1
Knowledge Sharing Tools and Mechanism	2	1	1
Total Score for Knowledge	4	5	3
Scale: 0 – no identified examples; 1 – existing examples, but not mainstreamed across system; 2 – existing examples and identifiable achievements/impacts; 3 – mainstreamed across system and high achievements/impacts.			

D. Accountability

The accountability lever is an area in which all three countries have very limited capacity. Out of a possible score of 9, Korea and Japan both scored 2 and China scored 1. Japan and Korea both have identifiable examples of participatory planning and stakeholder feedback mechanisms. While only China had identifiable examples of audit systems and practice standards. However, in all cases for this lever even where identifiable examples existed, it was not possible to locate identifiable impacts from the existing activities.

This core issue is a complex capacity area as it includes a system’s built in mechanisms for auditing, monitoring and evaluating; along with also including aspects of multi-stakeholder participation in decision and policy making processes. The first part of the lever, monitoring and evaluation, is not just about ensuring that what is suppose to happen is occurring properly; it is also about creating an institutional learning system that allows an organisation to improve practices through subsequent rounds of activity, to appropriately deal with potential constraints/weaknesses, and to incorporate best practices into future strategies.

Two main objectives can also be linked to multi-stakeholder participation. The first objective is to ensure the wide relevance and applicability of given policies or strategies through the inclusion of multiple stakeholders in the decision making process. The second objective is to create citizen empowerment and ownership through participation in the planning process in order to encourage greater responsibility among the public for achieving societal visions for a low-carbon, sustainable future.

In regards to SCP and ESC, there is a lack of holistic planning and a limited basis for decision making. Projects often aim at quantifiable target areas, such as visible reductions in energy usage or waste production, but little concern is placed on behavioural change. This is in part due to the lack of clear strategies for affecting this type of deeper change. A further reason is that since there are not effective ways to measure/quantify this type of behaviour change, government agencies are less motivated to work in this area as they cannot demonstrate the impacts of their efforts. Furthermore, in these three countries, there has been almost no public discussion and input into framing the national visions for a sustainable society or on what are the aspects of more sustainable consumption and lifestyles which unfortunately results in a deficiency in public empowerment for such social transformations.

TABLE 18: ACCOUNTABILITY ON EDUCATION FOR SUSTAINABLE CONSUMPTION

<i>Components of Accountability</i>	China	Japan	Korea
Audit Systems and Practice Standards	1	0	0
Participatory Planning Mechanism	0	1	1⁽¹⁾
Stakeholder Feedback Mechanism⁽²⁾	0	1	1
Total Score for Accountability	1	2	2
Scale: 0 – no identified examples; 1 – existing examples, but not mainstreamed across system; 2 – existing examples and identifiable achievements/impacts; 3 – mainstreamed across system and high achievements/impacts.			

Notes

- 1 Korea had actively encouraged a strong participatory planning mechanism as part of its Presidential Commission on Sustainable Development (PCSD) and its subsequent local groups. When the PCSD was replaced with the Presidential Commission on Green Growth, this participatory planning mechanism was largely disbanded.
- 2 The Stakeholder Feedback Mechanism was difficult to identify examples, however for those countries with examples of Participatory Planning Mechanism there is a chance that this mechanism can be seen as providing opportunities for feedback.

E. Overall Capacity Assessment of the Levers of Change

The overall review of the capacity assessment of the levers of change is now possible since the full assessment of all sub-components has been completed. The total potential score for all four core issues was 42. It is possible to provide each country with a capacity rating based on the percentage they achieved out of the total possible score. Japan scored the highest with a 19 thus achieving a 45.24% capacity rating. China achieved 38.1% capacity rating with a score of 16. Korea's total score was 14 and achieved a capacity rating of 33.33%.

It is also possible to look at the general capacity levels per each lever of change. The average capacity rating in regards to institutional arrangements was 38.9% across the three country cases. Leadership had the highest average capacity rating at 50%. For the knowledge lever, a 44.4% average capacity rating was achieved. The accountability lever was substantially weaker than the other three levers across all country cases and only achieved an average capacity rating of 18.5%.

Several important points are noticeable from this general comparison of the capacity assessment scores for the three countries. First, there is very little deviation between the three countries capacity scores; under each core issue scores only deviate by a one point maximum from the median score (the average deviation from the mean score would be slightly less than one). Second, only in three places were capacity scores greater than 50% of the potential score for the each lever (Japan scored 7 of 12 and China 6 of 12 for leadership, and Japan scored 5 of 9 for knowledge), thus in all cases there is still substantial opportunity for capacity building across all levers. Third, we can compare the countries' capacity ratings to the ranking scale as follows: achieving a score of 1 (existing examples, but not mainstreamed across system) for all sub-components would result in a 33.33% rating, a score of 2 (existing examples and identifiable achievements/impacts) would result in a 66.67% rating, and a 3 (mainstreamed across system and high achievements/impacts) for all sub-components would be 100%. So with this in mind, we see that all cases generally had identifiable examples of the various capacity aspects (an average score of 1) but that these examples were not yet leading to identifiable achievements and impacts (an average score of 2). Of course this over simplifies the assessment findings, and it is actually found that in reality often one sub-component has been well developed but the overall lever scores low because it is hindered by the undeveloped aspects of other sub-components.

TABLE 19: TOTAL SCORES FOR CAPACITY ASSESSMENT OF THE LEVERS OF CHANGE

	Institutional Arrangement	Leadership	Knowledge	Accountability	Total Score for Capacity Assessment	Total Capacity Rating ¹
China	5	6	4	1	16	38.1%
Japan	5	7	5	2	19	45.24%
Korea	4	5	3	2	14	33.33%
Total Potential Score	12	12	9	9	42	100%

Notes

1 Calculated as a percentage of the achieved score divided by the total possible score of 42.

Specifically looking at the lever of institutional arrangements, it is noticeable that efforts to increase the definition of roles and responsibilities for ESC is the most needed capacity in all three country cases. However, it is suggested that the inclusion of an inter-ministerial coordination mechanism to ensure that synergies with multiple relevant policies in the areas of SCP, ESD and sustainable development are made would lead to a significant increase in aiding the process of defining roles and responsibilities. Thus, a coordination mechanism could be seen as a more overarching need for ESC. This effort would most likely result in additional increases in overall capacity for this lever such as helping to improve the streamlining of the system.

The assessment of leadership capacity found a clearly formulated vision can actually result in an overall hindrance in leadership capacity unless that vision is clearly disseminated, explained and managed. However, without such a clear vision, it was also found that projects and initiatives can lack long-term strategic significance for achieving wider societal objectives. A balanced approach provides a more stable form of leadership that may not aim to make substantial leaps and bounds but rather to make steady, incremental improvements. For this second option, good communication and management is as essential as a clearly formulated vision. Another way to address this challenge is not just to provide a clearly formulated vision that looks towards some abstract future, but to also break that vision down into an easy to understand work plan with a progressive implementation strategy. In this way, the communication and management of the vision is simplified into specific activities.

Knowledge generation is a very important capacity not only for ESC policy making and implementation, but also for supporting proactive citizen involvement in sustainable consumption. In this area, too often the link between research supply and demand is aimed solely at improving policy making, but for ESC to be effective research must first identify what are the important knowledge and tools individuals need to live more sustainably in their daily lives. In this same way, improving the brain gain sub-component could be addressed from a wider social aspect by considering how well young generations are being provided with the knowledge, learning methods, and technical skills to face the current and emerging challenges of our world. Not only considering their training in employable work skills, but also to look at their ability to adapt and cope with serious system shocks. This approach would support not just organisational capacity strengthening, but it would also help to strengthen the societal capacity for transformative change.

Accountability capacities were very low for the three country case studies. In regards to audit systems and practice standards for ESC, only China had identifiable examples and even for this one case there are still opportunities for capacity building. Accountability for the implementation of effective ESC would be greatly increased by linking auditing systems to target achievements for a low carbon, sustainable society defined through a multi-stakeholder, participatory process. If the governments initiate participatory planning processes to establish a vision or plan for their future sustainable societies, this process should work to clearly define target achievements that are part of reaching a sustainable society. Examples of targets could be specific reductions in household energy consumption; increased percentage of green products being consumed in relation to total product area; promotion of ESC in all schools and all schools providing models for sustainable living; population demonstrating clear understanding of their personal responsibilities for the achievement of a sustainable society, and; increased usage of public transportation. The important aspects of setting such targets through a multi-stakeholder participatory process are twofold. First that

participation in setting these targets results in public buy in and responsibility towards achieving them. Second that these targets are used as baseline indicators to determine how well expected achievements are being achieved.

Figure 3 on the following page shows the total scores for the four levers of change per each country case, while figure 4 shows the percentage capacity rating achieved for each lever per country case. From the two figures, the commonality of existing capacities per lever for the three different countries and the limited amount of deviation between cases is clearly noticeable. It is also easy to recognise the facts that leadership was the lever with the highest levels of capacity while accountability was the weakest lever in terms of existing capacity. However, what it is less clear and only visible in figure 4 is that the average capacity rating for the knowledge lever was slightly stronger than the average capacity rating for the institutional arrangement lever. This discrepancy between the two figures occurs because the institutional arrangement lever has one more sub-component that was assessed than does the knowledge lever, thus the total potential score for the first was 12 while it was only 9 for the second. In fact, Japan's knowledge capacity rating is almost as high as its capacity rating for the leadership lever.

This comparison highlights the levers of accountability and institutional arrangements as the two levers generally needing greater capacity building. It is also possible to link these two levers by considering accountability capacities as providing direct inputs to the institutional arrangements by 1) helping to formulate relevant visions and plans through multi-stakeholder participation which in turns strengthens the coordination mechanism, 2) encouraging a greater defining of roles and responsibilities across a diverse set of stakeholders, 3) setting clear achievement targets that support merit-based appraisal, and 4) ensuring systems learning and progressive streamlining of processes through an effective monitoring and evaluation system. Of course, capacity building is needed across all core issues, however through this highlighted approach of utilising participatory planning mechanisms and auditing systems as front-end inputs and outcome feedback cycling respectively, the strengthening of the accountability lever can directly support stronger capacities under institutional arrangements.

FIGURE 3: TOTAL SCORES FOR CAPACITY ASSESSMENT OF THE LEVERS OF CHANGE

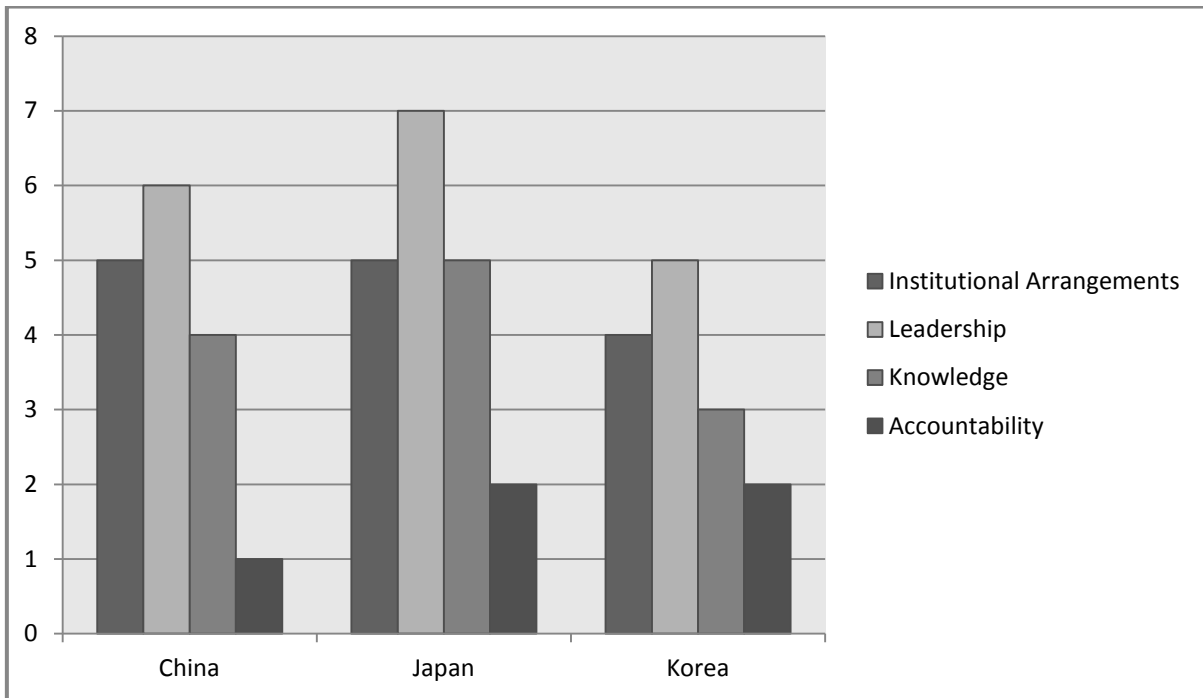
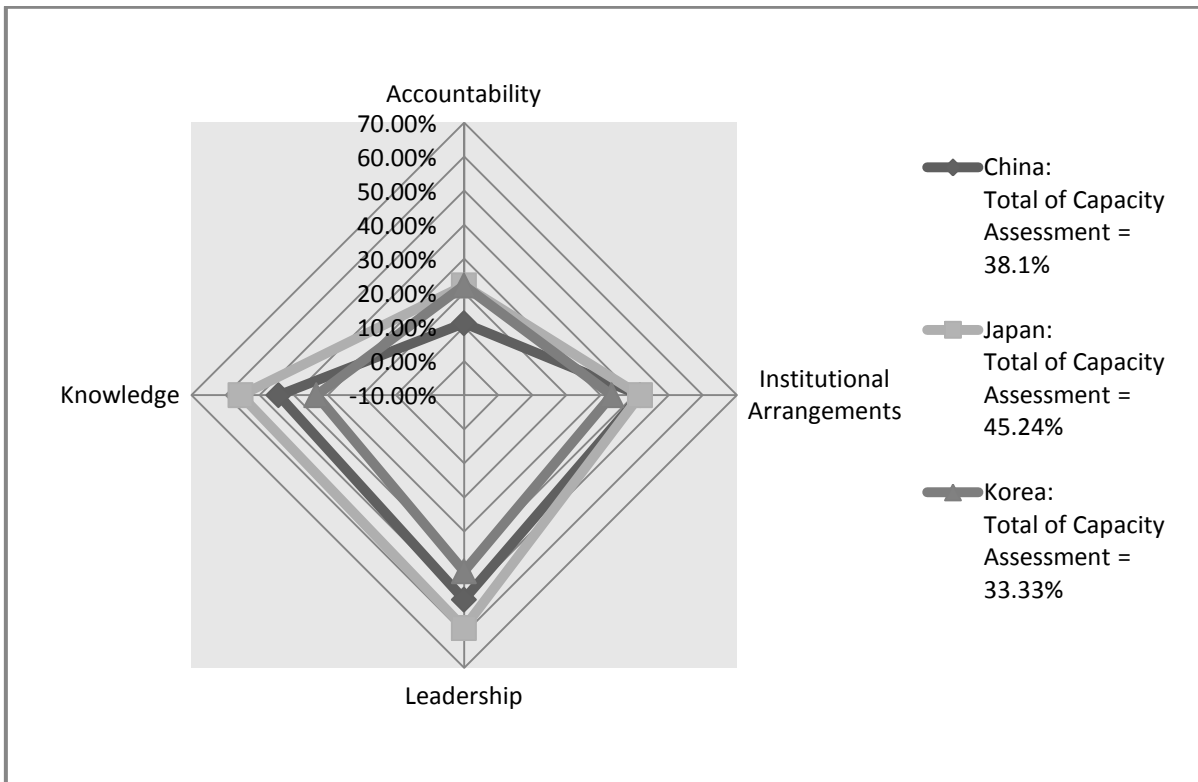


FIGURE 4: CAPACITY RATING ACHIEVED BASED ON TOTAL POTENTIAL SCORE



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CHAPTER 6

STRENGTHENING THE IMPLEMENTATION OF EDUCATION FOR SUSTAINABLE CONSUMPTION: *Recommendations for improving governmental capacity for ESC provision*

Robert J. DIDHAM¹

I. DISCUSSION

The previous chapter provided a comparative capacity assessment of the current governmental capabilities for effective ESC implementation in P. R. China, Japan and the Republic of Korea based on the three country case studies. When reviewing the assessment of the current capacities the governments have for implementing ESC, it is important to keep in mind that the expectation of this study was not to find existing systems for ESC implementation that were overflowing with capacity, but rather it was to be able to identify those areas that are ripe for capacity building and can lead to substantial improvements across the entire system. Furthermore, it must be acknowledged that in all three countries ESC still remains a very young and even novel topic that does not yet have substantial policy mandates to ensure its implementation. In comparison, if this study had conducted a capacity assessment for SCP or ESD in these three countries, the level of existing capacity would be much higher as these are both areas that have received numerous policy mandates. The discussion of sustainable consumption practices in these three countries in chapter 1 (section IV) of this report for example demonstrates that many policies and initiatives for strengthening green markets and sustainable consumption have already been fully mainstreamed.

One of main objectives of this work, along with identifying areas for capacity building to strengthen ESC, is to demonstrate how ESC can provide a means to better link and coordinate the existing capacity strengths the three countries have in regards to SCP and ESD. In this way, strengthening capacity for ESC may not always require establishing new capacities but rather finding means to integrate ESC into existing practices and frameworks. Where this is possible, the goal is not solely about strengthening ESC implementation but rather to demonstrate how ESC can be a crucial link in wider sustainable development policies especially when we consider the importance of citizen involvement in the long-term achievement of a low-carbon, sustainable society.

The starting point for this chapter thus should be a review of those important existing strengths and capacities under the wider sustainable development policies and frameworks, especially those for SCP and ESD. All three countries do already have existing capacities that can provide a good foundation to build on for future efforts. One of the most significant capacities for all three countries is the existence of specific agencies that could take on a strong role in establishing inter-ministerial coordination on sustainable development and sustainable consumption and production. These agencies are China's National Development and Reform Commission, Japan's Cabinet Office

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(including the new Consumer Affairs Agency), and Korea's Presidential Committee on Green Growth. The structure and mandates of these three agencies provide the opportunity to establish clear working mandates on sustainable development and SCP, to clearly distinguish roles and responsibilities across multiple ministries, and to facilitate inter-ministerial coordination across relevant areas.

Coordination mechanisms can provide an overview of a country's efforts to encourage sustainable development and sustainable consumption. To achieve this, there is a need to have strong leadership capacities through clearly formulated development visions and objectives and a good process of communication and management. For all three countries, leadership is currently their strongest capacity area, thus coupling this with a strong coordination mechanism should effectively aid in strengthening both capacity sets. Though each country has differing strengths and weaknesses under their leadership lever and separate needs for capacity building, efforts to better link this area with their coordination mechanisms should prove in itself an effective means for developing further leadership capacities and streamlining them into the wider system.

Once leadership is linked with the coordination mechanisms, it becomes possible to ensure that programmes and initiatives of various ministries are harmonised and support one another. Specifically for ESC, such coordination allows for the identification of key activities that are occurring to shift consumption patterns and then to link in educational components to also encourage appropriate behavioural change among consumers. Many SCP initiatives aim to enable and exemplify conditions for more efficient and sustainable consumption which results in greater opportunities for an individual to practice more responsible consumption, however consumer choice is not solely guided by the existing consumption infrastructures. Thus, when such progressive measures are taken to slowly reshape the physical structure of production and consumption systems, it is necessary to also utilise educational tools and information provision to reshape the social and cultural factors that influence consumer decision making. Strong coordination mechanisms can ensure that the messages, incentives and opportunities consumers are receiving are clear and consistent.

Mentioned above is the need for structuring coordination with a clearly defined vision, but in order to ensure the production of a clear vision it is necessary to consider how well this process is linked to the capacities for accountability. Under the accountability lever, it was found that all three countries lack strong capacity. Initiating these capacities for participatory planning, stakeholder feedback, performance standards and auditing into the vision forming process is an effective way to greatly strengthen them. Furthermore, these actions have additional benefits of engendering wider public support and ownership towards the vision and its objectives which can result in a larger body of relevant and responsible actors to support its implementation.

When considering the means for improving accountability capacities, it is beneficial to focus on providing accountability mechanisms at three different points in the process – addressing the inputs, throughputs and outputs of the process. At the point of input, or forming visions and development planning, it is essential to ensure that wide relevance is structured into the vision or plan and this is best accomplished through multi-stakeholder participation in its formation. Public participation in forming development visions and objectives should also be viewed as an important educational activity for citizens to gain understanding of the principles of sustainable development. Although governmental bodies unfamiliar with this process of participatory planning are weary of the burdens

and time consumed in the process, such citizen engagement ensures greater public buy-in and support for the proposed projects and development trajectories. In terms of throughput and project implementation, accountability is increased through good project management by developing a clear work plan that breaks the overall vision into practical components that are easy to put into action and by outlining a set of target achievements/performance standards to assess whether things are occurring in a timely and efficient manner. Monitoring and evaluation systems provide appropriate accountability at the point of output, furthermore it helps to establish learning cycles that brings the knowledge gained during one project or development cycle into the framing of the next cycle. To effectively do this, it is necessary to structure the monitoring process around the question of if the identified/desired objectives are being achieved. Once the current implementation is monitored, the next step is to evaluate and identify the key points such as in a SWOT analysis – strengths, weaknesses, opportunities and threats. Finally, the last step is to reflect the lessons learned from this process into the framing of the next project or development cycle.

II. POLICY RECOMMENDATIONS FOR STRENGTHENING ESC IMPLEMENTATION

Strengthening the governmental capacities for implementing effective ESC is a complex subject that must take into consideration the diversity of potential capacity building that is feasible for governments to undertake. It must also consider the variety of capacities that support implementation including those outlined under the four levers of change: institutional arrangements, leadership, knowledge and accountability. Having provided an assessment of the current capacities for ESC implementation in P. R. China, Japan and Republic of Korea, this section now aims to detail several practical steps that these governments can initiate to achieve not only better ESC implementation but to generally strengthen their capacities for long-term effective implementation. At the level of a systems analysis, some of these recommendations may extend beyond the focus on ESC and could be applied to others policies areas relevant to sustainable development. Six recommendations are provided in total, including:

- 1) Expanding Roles and Responsibilities for ESC beyond National Governments;
- 2) Applying Multiple Policy Mechanisms and Inter-Ministerial/Inter-Agency approaches;
- 3) Defining Policy Priorities and Target Areas for Sustainable Consumption;
- 4) Addressing ESC as a thematic approach to ESD and SCP;
- 5) Improving Accountability as a means to strengthen the overall system, and;
- 6) Advancing ESC in Formal Education Curriculums.

A. Expanding Roles and Responsibilities for ESC beyond National Government

When we consider the highlighted actors and the proposed ideal roles that they are expected to play (as shown in table 20 on the following page), it is striking how much responsibility is placed on governments – especially at the national level and in relevant agencies – for driving the major shifts in society’s patterns of consumption and production. In one aspect, this is quite reasonable that governments should serve as the primary actor in stimulating these social transformations. However, it is also important to recognise the overburden that is thus placed on governments to affect changes at the level of socio-cultural values and traditions. It is the role of government to

TABLE 20: ACTORS AND IDEAL ROLES IN PROMOTING SUSTAINABLE CONSUMPTION

Actor	Roles
National Government	<ul style="list-style-type: none"> • Conduct macro-level policy planning and coordination (including inter-ministerial efforts); • Secure input of multi-stakeholders into policy formation; • Develop diverse policy instruments (i.e. educational, cooperative, information, economic, and regulatory); • Develop legislative frameworks to promote green supply chain management • Ensure sufficient funding and resources; • Exemplify best practice and be a proponent of progressive change; • Promote communication among diverse stakeholders; • Conduct international cooperation on SCP.
Local Governments	<ul style="list-style-type: none"> • Provide main role for implementation of policies; • Translate policy statements into practical actions; • Promote procurement of green/sustainable products.
Agencies for certification & monitoring of government programmes	<ul style="list-style-type: none"> • Coordinate specific policy measures; • Provide accountability on environmental performance; • Control environmental standards and guarantee certification process; • Conduct monitoring and evaluation.
Civil Society and NGOs	<ul style="list-style-type: none"> • Support project implementation; • Advocate for effective policy implementation; • Promote business to civil society communication.
Business and Industry	<ul style="list-style-type: none"> • Strengthen infrastructure for SCP and green markets; • Provision of good product information regarding environmental performance.
Retailers and Advertisers	<ul style="list-style-type: none"> • Bring awareness to the options for sustainable consumption; • Promote good options for sustainable consumption.
Media Institutions	<ul style="list-style-type: none"> • Promote public awareness on SCP; • Highlight good practices for sustainable consumption and lifestyles.
Research and Academia	<ul style="list-style-type: none"> • Provide a strong basis for policy decision-making; • Conduct research and innovation; • Visualize the efficiency and effectiveness of green supply chain management • Measure and analyze the impacts of various policy measurements and instruments.
Educational Institutions	<ul style="list-style-type: none"> • Integrate themes of sustainable development and sustainable consumption across the curriculum and through multiple disciplines; • Promote whole systems understanding in earth systems and natural science disciplines; • Promote social awareness of the need for considering human development activities in relation to wider eco-systems; • Empower citizens to be active participants in achieving a sustainable society.
Households and Consumers	<ul style="list-style-type: none"> • <i>Divided sense of responsibility: some literature places extensive responsibility on the consumer as the primary actor for driving change in consumption patterns, while others identify the consumer as having an extremely limited role in influencing consumption patterns.</i> • Furthermore, there is still a lack of knowledge on what are the ideal ways in which households can move towards more sustainable patterns of consumption.

coordinate the cooperation and participation of multi-stakeholders, but in doing so it may be important to consider how these roles and responsibilities can be better shared across the multiplicity of actors.

There are numerous actors who can contribute to the effective implementation of ESC, and in most cases rather than competing with one another these actors' various expertises help to strengthen the overall impact of these initiatives. For example, the first Green Purchasing Network was initiated in Japan (GPN-J) from the recommendation of the country's Ministry of Environment (MOEJ), and now all three countries have similar networks. Though GPN-J was initially promoted by MOEJ and maintains close links, it fully functions as a non-governmental, membership organisation that includes an extensive network of partners from businesses, local governments, consumer groups, and environmental NGOs. The high impact of this type of network has been the main reason for its extensive replication throughout both Northeast and Southeast Asia. This type of multi-stakeholder network has the potential to create a powerful cooperative dynamic where major progress is not the burden of just one actor. Rather it can be the result of a snow-ball effect consisting of incremental improvements occurring from different sectors on a regular basis.

Increased public participation in vision forming for a sustainable society supports greater public ownership and buy-in to this process. Facilitating this participation at the local level through various community groups also creates a further powerful actor that can take on responsibility for implementing ESC. The structures of multi-level governance are also important to consider for effective policy formation and implementation of ESC.

The relationship between national government and local government needs to be developed in regards to the promotion of sustainable consumption. As some of the local examples from the three country case studies demonstrate, local governments can initiate very effective ESC projects as they are better situated to respond to local contexts and citizens' needs. Local governments can also form partnerships with NGOs and civil society groups to strengthen the practical implementation of many projects.

B. Applying Multiple Policy Mechanisms and Inter-Ministerial/Inter-Agency approaches

The government has many available policy tools and mechanisms it can use to promote sustainable consumption. Utilising a diversity of approaches helps to strengthen the overall effect. A report by the German Technical Cooperation (GTZ) and partners (2006) details a set of five policy instruments to support sustainable consumption and production. These instruments are: 1) regulatory, 2) economic, 3) educational, 4) cooperative, and 5) informational (adapted from Tyson, ed. 2006). In order to successfully implement a variety of policy tools and approaches for ESC, it will be necessary to allow each government agency to play their most effective role and to achieve policy integration through inter-ministry/inter-agency coordination.

The U.K. government outlined a strong policy strategy in *Securing the Future* (2005) based on five main objectives:

- 1) *Enable*, action should be taken to remove barriers to sustainable consumption and to develop a supportive infrastructure.
- 2) *Encourage*, focuses on rewarding good behaviour, penalising bad behaviour, and enforcing minimum standards of practice.
- 3) *Engage*, the main objective is to involve the public and to stimulate local, community action.
- 4) *Exemplify*, the government should lead by example by developing and implementing good practice and also through achieving a consistency in their policy frameworks.
- 5) *Catalyse* builds on the achievements of the other four steps, and once a critical engagement is achieved efforts should be made to stimulate major shifts in social and cultural habits (adapted from HM Government 2005, 24-41).

These five objectives provide a clear strategy for a holistic and integrative approach to promote sustainable consumption by addressing the physical infrastructures for sustainable consumption, encouraging individual practice, influencing socio-cultural values and traditions that frame current lifestyles, and improving political systems and frameworks. In this manner, a coordinated process can be visualised where the relevant ministries take efforts in areas of industry and infrastructure to ensure that greener consumption options are readily available. Coinciding with this process, economic and finance ministries can establish systems for rewarding consumers who take substantial efforts towards sustainable consumption such as eco-points or tax rebates, while environmental and educational ministries can work with engaging the public to promote and encourage these new initiatives. Finally, as a whole the government should work to mainstream these practices across public agencies and also to encourage wider participation of multi-stakeholders which can be done through the respective coordination agencies each government already has. This approach can readily be applied to single consumption areas, and a good example where this has occurred would be in promoting more energy efficient appliances. However, this could also be applied to much larger concepts such as developing local food networks or reducing the amount of household waste produced which take extensive efforts in changing both infrastructures and socio-cultural values.

C. Defining Policy Priorities and Target Areas for Sustainable Consumption

Confusion over what *more-sustainable* consumption means continues to hinder effective policy formation. Generic definitions of sustainable consumption are understood by government officials, however clear principles for sustainable consumption and primary target areas for policy formation are much less apparent. Governments must work to clearly define what they intend to achieve in promoting sustainable consumption: i.e., is this just a mere lessening of overall consumption (quantitative issue), or is it a change to greener forms of consumption (qualitative issue)? Also, identification of target consumption areas that currently have significant environmental impacts would distinguish clear issues and relevant actions that individuals and household could take towards achieving sustainable consumption. Though there will of course be similarities between different countries interpretations of SCP and ESC, it is also important that country relates their own interpretations to their specific national and local contexts to distinguish their priorities and objectives.

The vision for a sustainable society, or even just sustainable consumption, must also be framed in a manner that promotes it as achieving something “better”. It is of course the case that consuming sustainably will mean consuming less of or giving up certain items and also in general consuming less of overall amount of material goods. However, it is fully possible to decrease consumption of products and then apply that excess capital to the consumption and valuing of human services, and in this way it is possible to envision a sustainable change in consumption patterns that could also increase the opportunity for well-paid and dignified livelihoods. Other potential changes to production and consumption systems could aim at both reducing and meeting society’s energy demands through renewable resources, and this in turn could result in a reduction in household energy bills. The point here is that sustainable consumption can be aligned with another important social objective of improving overall quality of life along with improving the health of the environment we live in. For the sake of sustainable development, the way in which it is envisioned and defined means a lot to its long-term success. If it is only about giving up and sacrificing then even the most devoted people will grow weary of it, but if sustainable consumption practically helps to improve our quality of living then it will more likely achieve lasting support and success.

Government officials understand that sustainable consumption should reduce the environmental impacts of modern consumption patterns through energy efficiency and resource savings, but there is no substantive identification of behaviours that need to be influenced to encourage this transition. Clear identification of the important values that influence these behaviours and support consumers’ proactive participation in sustainable consumption would provide a better understanding of the types of socio-cultural transition ESC tries to promote, such as the values for environmental citizenship identified in Choi and Didham (2009):

- 1) *Pro-environmental values* – a personal belief that protecting the environment is important;
- 2) *Individual Empowerment* – that each person can be a powerful agent of change;
- 3) *Responsibility* – a sense of environmental citizenship and duty;
- 4) *Simple actions* – recognition that little steps can lead to big impacts;
- 5) *Future Vision* – an inspired view of achieving a sustainable society (2009: 45).

Furthermore, there is also no substantive public discussion of what are the types of sustainable lifestyles that their society hopes to achieve. Public participation in forming national visions such as a “2030 Vision for a Sustainable Consumption Society” would greatly increase the sense of public ownership and responsibility for achieving this vision.

D. Improving Accountability as a means to strengthen the overall system

Methods for building accountability capacities have already briefly been discussed at the end of section I of this chapter. It was highlighted that there are three main project phases in which accountability aspects can be addressed: as inputs to the planning phase, as throughputs of the implementation phase, and by conducting a review process based on the outputs and results of the given initiative. It was also highlighted that providing capacity building for the accountability lever can provide additional benefits by helping to strengthen the institutional arrangements lever. This is done by utilising participatory planning mechanisms and auditing systems to provide both front-end inputs to a coordinating vision and outcome feedback cycling.

i. Participatory Planning Mechanisms

The addition of a participatory planning mechanism is a noted way to substantially increase capacity as it directly improves the accountability lever and indirectly adds strength to the institutional arrangements and leadership levers. However, managing participatory planning processes are often viewed as significant endeavors in themselves that divert time and resources away from project implementation. The process of participatory planning for sustainable development is sometimes referred to as 'envisioning'. "The notion of 'envisioning' – enabling lay people, along with technicians and policy makers to anticipate environmental change and thereby contribute to its management – is inherently appealing but very difficult to realise" (Selman, 1996: 77). Some of the more robust techniques for participatory planning have been aimed at local-level planning and also come from development practitioners working in the field from which very important benefits have been observed as a result of effective participatory processes. These benefits can be understood from the perspective of experiential learning theory (see Kolb and Fry, 1975 and Kolb, 1984) in that the participatory planning provides a social process that helps to align people with the goals and values of sustainable development through direct examination of the type of future that is desired and the concepts that frame social progress. Furthermore, this process can encourage both critical and creative thinking to open up and consider a collective vision of a future under an ideal scenario – an activity that many people overlook in framing their day to day activities (see Cooke and Kothari, 2001 and Hickey and Mohan, 2004). Habermas's (1981) idea of communicative rationality can also provide a model that allows us to understand how the change in meaning and culturally-defined belief systems can occur through engagement in consensus-oriented communication. "*Communicative rationality ... characterizes the activity of reflecting upon our background assumptions about the world, bringing our basic norms to the fore, to be questioned and negotiated*" (Braaten 1991: 12).

Acknowledging the important social learning benefits that participatory planning can engender, there is a high-level of justification for including this process into the vision forming for sustainable development and SCP policies. Prior to initiating a participatory process, it necessary to ensure that the appropriate people are engaged, thus it is ideal to conduct a stakeholder analysis and also establish means for wider citizen engagement. The participatory process itself can be broken down into three stages: 1) Assessing the Current Situation, 2) Creating Vision, and 3) Defining Development Goals and Priorities. The overall objective of these three stages is to establish a collective understanding of what is desired to be achieved under a given vision or plan.

The first stage, assessing the current situation, aims to establish a collective agreement of what is the current situation including the main strengths and weaknesses. This creates a common starting point or baseline from which future development changes can be compared with. A further aspect of establishing such a baseline is to facilitate a progressive development process that is based on adaptive strategies rather than coping strategies. Fortunately, this stage is supported by a plethora of methods and tools to conduct such assessments. These techniques are generally classified under the Participatory Rural/Rapid Appraisal (PRA) tool-kit (see Chambers, 2003 and Kumar, 2002) and was mainly designed through trial-and-error in the field by development practitioners. Often a selection of these tools will be used in parallel with one another, however there are a few specific methods that have developed into standalone processes on their own; these include Three-Dimensional Modeling such as Planning for Real, Asset-Based Community Development, and Livelihoods Analysis.

The second stage, creating vision, moves on from the starting point established in the first stage and looks towards the future that we are trying to achieve. At the beginning of this stage, it is beneficial to open the discussion up to ideal scenarios of the desired future and to acknowledge the wide variety of what could be achieved if focused upon. This stage is not about defining specifics but rather to open up conceptual thinking to a broader and more creative perspective than is usually applied in policy planning. This stage does not need to be lengthy; a few well structured discussions are often sufficient. Also, these discussions do not require specific tools or methods but they can be facilitated by the 3D Modeling approaches and also through Dream Mapping (Kumar, 2002: 178-80) if greater structure is desired.

The third stage, defining development goals and priorities, takes the ideal scenarios conceived in the previous stage and works to formalise and narrow these into practical trajectories. The main substantial outcome of this stage and the entire process is to clearly define goals and priorities that will support turning the vision into reality. These goals and priorities can still be theoretical in nature though, as it will be in the next project phase where a structured work plan will be detailed. There are several tools that are beneficial in this stage such as a SWOT analysis, a needs/assets survey, cause/effect diagrams, problem/objective trees or a force field analysis. Nonetheless, all of these tools take the same methodological approach which is to first identify what are the current factors that influence development (or achieving the given goal of the project) and then to assess the current influence these factors have whether negative, positive or neutral. Following this, the major desires for the future can also be mapped into this process. Consideration is then given to which strengths can provide foundations to build from, which factors need to be addressed as threats, which barriers need to be removed, and which new factors must be integrated to achieve future desires. Lastly, from this mapping it becomes possible to draw out the main areas in which work is needed and what approaches should be taken.

A final point that must be added to the discussion about this stage is that time spent on this stage (and also for the whole of the participatory planning process) will be relevant to the coverage, scope and time-scale of the expected vision. Thus, if the vision is for one specific area of sustainable consumption it may take only a few meetings to develop such a vision but if it is the long-term vision of a sustainable society it could be a very lengthy process that also requires regular review and reform.

ii. Work Plan and Performance Targets

In order to achieve strong accountability across project implementation it is important that the required activities are detailed in an easily implementable manner. There are two specific products that support this: 1) a work plan that details the actions to be taken, the time frame over which they are to occur, the main actors responsible for implementation, and the resources to be made available, and; 2) a set of target achievements and performance standards that provide guidance for project implementation and that allows for a quick assessment to see if things are occurring in a timely and efficient manner. When these two products are well prepared, not only do they increase accountability capacities but they also add to strengthening project management. As many of the other capacity levers also aim at supporting the project implementation phase, accountability at the level of throughputs is also covered across other capacities.

iii. Monitoring and Evaluation

Earlier in this chapter, the important benefit of monitoring and evaluation (M&E) processes was identified as the establishment of continuous learning cycles that helps to initiate an action-reflection project cycle. To effectively establish this requires that the M&E process appropriately responds to the earlier two accountability phases by utilising the vision, goals and priorities, and performance criteria as the basis for establishing indicators in the monitoring and evaluation phase. The goal of M&E is to assure that development activities are being implemented to plan and that these projects are resulting in the types of positive changes that are desired. Furthermore, a good M&E system will identify potential threats or constraints before they are causing serious negative impacts. Thus, M&E can be utilised both as a system of checks and balances and also as a learning tool to identify the important strengths and weaknesses of a given project.

The M&E process must account for the holistic nature of various sustainable development projects which can be challenging when society is accustomed to measuring progress based on only a minimal number of growth oriented indicators. Establishing sustainability indicators has become the preferred way to assess development projects and numerous attempts have also been made to establish a set of ESD indicators. However, one of the main benefits and at the same time drawbacks of sustainability indicators is their direct relevance to individual development projects. The indicator sets are usually created to respond to a specific vision or project agenda, and in this way they are highly relevant to this one initiative. The disadvantage is that the indicator set is not replicable to other initiatives, and each initiative must go through the process of establishing its own indicator set.

When establishing sustainability indicators, it is important to review the potential indicators to ensure their rigour. The first review approach is to consider if the indicators cover multiple aspects and time-scales of the initiative, such as the specific short-term achievements and the long-term transformations that are desired. The second review approach is to judge each individual indicator on a criteria to ensure its usefulness and value, such as the following five points:

- I. Is the indicator clearly defined?
- II. Can the required data be easily obtained?
- III. Is the indicator measurable and will the data actually express a value of some type?
- IV. Does it measure something useful and relevant?
- V. Does a change in this indicator suggest a course of action?

A final review approach to condense the overall amount of indicators is to form a table with the goals and priorities listed on the vertical axis and the potential indicators listed on the horizontal axis. Then each indicator should be assessed for which goals and priorities they respond to with the aim of each goal or priority being covered by more than one indicator and relatively even coverage across all of the goals and priorities. Furthermore, in cases where specific indicators respond to multiple goals, they are often prioritised for their holistic nature.

E. Addressing ESC as a thematic approach to ESD and SCP

Education for Sustainable Consumption can aid in synergising different aspects of the overall sustainable development agenda, especially SCP, ESD and sustainable lifestyles. The key activity here is to clearly highlight and support opportunities for individuals to actively practice sustainable consumption and to structure these experiences as unique forms of action learning for

understanding the wider principles of sustainable development and SCP. ESC aims at providing a process of active and communicative learning that challenges traditional patterns of behaviour through a process of integrating science and values into a socially responsible worldview that places the student or consumer at the center of a dynamic system rather than as an outside observer of a stable system.

ESC provides a model for reversing the traditional abstract learning models by building from the idea of self-aware learners who are able to draw direct connections to the interrelationship between their own actions and the quality of the world around them. Ideally this process should engender the abilities for critical reflection and action learning that allows the students to apply their learning to their own behaviours in an empathetic manner. Furthermore, ESC should include an aspect that also relates to global perspectives and relevance to international issues. In its relationship to ESD and SCP, ESC is important though for its ability to provide a personal perspective and relevance to the individual's daily life. Both ESD and SCP can fall into theoretical, academic traps of being outside the range of relevance to the average person's daily experiences. While ESD (and also to lesser SCP) often take the approach of learning first and action second, ESC is able to in some ways reverse this process by starting first with action then moving on to deeper learning concepts that include the more complex principles and values that frame sustainable consumption and sustainable development.

When we review the main drivers of sustainability, it is the consumption driver that the majority of people can take the most significant personal action on. Thus, if the goal is not just to achieve citizen acceptance for the idea of sustainable development but also to achieve their commitment in making this transition then sustainable consumption is the appropriate starting point. This commitment of responsibility is a key ingredient for progressive learning in the areas of ESD and SCP.

F. Advancing ESC in Formal Education Curriculums

A clear area for strengthening ESC is of course through its mandates within formal education curriculums. As the focus of this study was on governmental capacities for implementing effective ESC the direct suggestions from this study for improving ESC in the classroom are limited. However, as this is an area that has been well addressed in other publications there are many recommendations that can be drawn upon, such as UNEP's (2010a) *Here and Now* (see Box 9 for recommendations from this publication) and Consumer Citizenship Network's (2008) *"Images and Objects" Active Methodology Toolkit*.

When addressing the capacities for implementing ESC within formal education systems, the same levers of change used in this study remain relevant for consideration. In regards to institutional arrangements, schools can provide some of the best learning models for sustainable consumption and sustainable lifestyles if the physical infrastructure of the school is prepared to model energy and resource savings and the daily school activities are managed to ensure sustainable practices. Regarding leadership, the multi-disciplinary integration of ESC requires strong communication and management capacities. In some examples, efforts are taken to share management and decision-making activities directly with the students which can be a very innovative method to increase leadership and citizenship from a young age as the pupils must directly contribute to the quality of the world around them. One of the substantial hindrances to the expansion of ESC has been the lack

of capacity in terms of the knowledge lever. This could be readily improved through the provision of mandates for ESC in teacher training colleges and by regularly holding in-service training on ESC. Furthermore, the production and promulgation of more learning materials on ESC would help facilitate knowledge sharing. As far as accountability, the same process as described in sub-section D remains applicable to this scenario especially in terms of the inclusion of performance standards and M&E systems.

BOX 9: ESC ROADMAP OF RECOMMENDATIONS (FROM *HERE AND NOW*, 2010)

How can education for sustainable consumption be achieved?

In a concerted effort to address the interdisciplinary issues of equitable, sustainable consumption and production, governments are urged to:

- 1) Ensure that education institutions reflect in their daily management the priorities given to sustainable development.
- 2) Include themes, topics, modules, courses and degrees about education for sustainable consumption in established curricula.
- 3) Encourage research in education for sustainable consumption-related areas.
- 4) Strengthen connections between researchers, lecturers, teacher trainers and socio-economic actors and stakeholders.
- 5) Enhance cooperation between professionals from diverse disciplines in order to develop integrated approaches to education for sustainable consumption.
- 6) Facilitate teaching and teacher-training that strengthens global, future-oriented, constructive perspectives within education for sustainable consumption.
- 7) Reward creative, critical, innovative thinking related to education for sustainable consumption.
- 8) Ensure that education for sustainable consumption respects the importance of indigenous knowledge and recognizes alternative lifestyles.
- 9) Foster intergenerational learning as an integrated aspect of education for sustainable consumption.
- 10) Provide opportunities for practical application of theoretical study through social involvement and community service.

Source: (replicated in full) UNEP (2010a) *Here and Now! Education for Sustainable Consumption: Recommendations and guidelines*. Victoria Thoresen, main author. Paris: UNEP.

III. CONCLUSION

This final chapter has identified capacity building opportunities to strengthen the implementation of ESC in P. R. China, Japan and Republic of Korea. Although the main recommendations are generalised for all three countries, the chapter also began by recognising that each country already has its own unique strengths and weaknesses. In preparing a capacity building response, the individual countries should start by acknowledging their existing capacities as the foundations to expand forward from. At the same time, those areas that are obvious weaknesses should be targeted for capacity building. As part of this process, a choice will have to be made between trying to improve all the sub-components of the levers at the same time through an incremental process or to fully advance individual sub-components one-by-one. The answer to this

question will depend on the circumstances and also the specific capacity. In some cases, where a new capacity is to be developed it may be much easier just to establish it in its full and complete mainstreamed form straight from the beginning. However, in other cases where the capacity building process itself will need to be extensive, then it could be more sensible to do this piece by piece. For those capacities where the second approach is more appropriate, then it would also make sense to make incremental improvements to multiple capacities in sequence rather than focussing solely on the same capacity.

Throughout this work, ESC has been promoted not just as another add-on topic to include in classroom education, but rather as an integral process for strengthening SCP and ESD systems by bringing meaning and relevance to the life of ordinary citizens. It is with this understanding that the capacity building recommendations suggested above have been developed, and this is also the hope for the direction in which the governments of these three countries will proceed and establish greater policy mandates for the inclusion of ESC. Educating citizens about their roles and responsibilities in helping achieve a low carbon, sustainable society is at the essence of what we understand as *Education for Sustainable Consumption*. Of course, ESC provides many important learning opportunities when integrated into the formal education curriculum, but it also has potential that goes well beyond that single focus. ESC can be understood as a form of citizenship education, and at its core it is about *encouraging active participation*. This active participation can be many areas: participation in forming the vision for a future sustainable society, participation in implementing that vision, participation in transforming consumption patterns, participation in testing and experimenting with new possibilities for sustainable consumption, participation in supporting greener markets, and participation in strengthening communities to be the core social unit at which the networks and relationship for responsible living are built.

It may come across as if ESC is being painted as some great harbinger of transformation and social change – and in one small aspect it is, but at the same time in no form is it being promoted as the stand alone solution that will drive all other changes. The other policy areas of sustainable development and SCP have already generated substantial impacts and remain absolutely necessary. As mentioned at the beginning of this chapter many of these existing policies have aimed at influencing the infrastructures that support patterns of production and consumption and drive many of the common practices in our daily lives. At the same time, the social change that is envisioned for a low carbon, sustainable society must reach the level of socio-cultural transformation. It is not within the scope of this research to say which factor drives the other – the infrastructure or the socio-cultural values, nor is it even expected that there is one clear cut answer. More likely, improvements to these two variables go hand-in-hand in a mutually reinforcing manner. The objective of this work is to provide direct and practical means for improving governments' ability for effecting change at the level of socio-cultural values and more specifically at the level of individual behaviour and consumption choices.

This objective of influencing individual behaviour is an area that governments can be reluctant to address as there is concern of being dogmatic or authoritarian. The purpose of ESC is not to tell people how they should behave, but rather to provide the learning methods and communicative opportunities to address the relationship between their own actions and the state of the world around them in a conscientious manner. Furthermore, it is about engaging people at a collective level to decide what type of future they would like to achieve not only for themselves, but for their

children and grandchildren, and in doing so opening consideration to what are their own roles and responsibilities in achieving this desired future. Finally, ESC is about enlightening people about the choices they make in their daily lives in order to understand the impacts of those choices and to provide them with the ability to select their own choices in a way that is congruent with the future they would like to achieve.

The recommendations for strengthening governmental capacity for ESC implementation aim at improving the meta-level structures for generally producing effective ESC initiatives and ensuring positive impacts rather than focusing on the micro-level activities and specific initiatives that can be part of strengthening the topical and subject basis of ESC implementation. This choice was taken due to the recognition that there is a very wide diversity of subjects and topics that can be addressed under an ESC framework and the belief that prior to increasing the quantity of topics covered by ESC it is first necessary to strengthen the quality of how ESC initiatives are implemented. Several good practices for specific ESC projects are identified in the country case studies, and additional publications for broadening the focus of ESC within formal curriculums were also highlighted in the last recommendation. Adding new topics and initiatives to the ESC frameworks of course helps to improve its overall implementation. However, acknowledging the potentials for capacity building available to each government which would improve the overall quality of the framework for ESC implementation, it is argued that the capacity building recommendations suggested in this chapter will lead to a greater long-term improvement of ESC and additionally provide benefits for wider policies on sustainable development including SCP and ESD. These system level improvements are thus viewed as part of the larger attempt to initiate the wider institutional transformations needed to support the socio-cultural changes towards achieving a low carbon, sustainable society.

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APPENDIX 1: Concept Note and Interview Questions, example from Chinese case study



CONCEPT NOTE FOR CASE STUDIES:

Research on Promoting Sustainable Consumer Behaviour & implementing Education for Sustainable Consumption in China, Japan and Republic of Korea

The Institute for Global Environmental Strategies (IGES) is conducting strategic policy research on the promotion of sustainable consumer behaviour. In order to explore this area, the research will concentrate on the state of implementation of Education for Sustainable Consumption (ESC) in China, Japan and the Republic of Korea. As part of this research, IGES is collaborating with the Beijing Normal University to conduct a national case study in China on the current strategies and capacity of the government to promote sustainable consumer behaviour.

Background of Research

The goal of this research is to advance the quality and implementation of Education for Sustainable Consumption in Northeast Asia. ESC supports the transition towards a low carbon society through the realization of sustainable consumption patterns by directly influencing consumer behaviour. ESC is addressed as a sub-topic of Sustainable Consumption and Production (SCP) which is receiving increased attention from the United Nations which will establish a 10-Year Framework of Programmes (10YFP) on SCP as the outcome of the current policy cycle. Regional work is also occurring in Asia and includes activities undertaken by the Asia-Pacific Roundtable on SCP and UN-ESCAP's Green Growth initiative.

Despite this growing international consensus on the importance of SCP, efforts on the promotion of sustainable consumption and ESC are still limited globally. In the Asia-Pacific region, policy efforts on sustainable production are now advanced, but sustainable consumption remains largely unaddressed. Governments are limited in their efforts to promote sustainable consumption by a lack of capacity and understanding on how best to influence consumer behaviour and effectively implement ESC. This research aims to highlight where governmental capacity, policy and strategies for promoting sustainable consumption may be strengthened, in order to better influence consumer behaviour and improve the implementation of ESC in China, Japan and Republic of Korea.

Objective of Research

The objective of the research is to conduct an assessment of current governmental capacity for effective ESC implementation and to identify pathways towards increased mainstreaming of sustainable consumption in Asia. The main research will be conducted as interviews with relevant government officers. The findings from this research should focus on key aspects of the current governmental context for promoting sustainable consumption and consumer awareness raising (including relevant policy frameworks, overall strategies, understanding of government officers, and barriers to implementation). The outputs should also give due consideration to opportunities for better vertical integration of SCP policies and specific ESC initiatives on sub-national and local levels.

We, the coordinators of this research, would like to kindly thank you for your participation and cooperation. Your contribution is greatly appreciated and ensures the relevance of this work.

Sincerest Regards,

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Interview Questions for
The study of Governmental Capacity for promoting sustainable consumer behaviour and implementing Education for Sustainable Consumption

- 1a) What are the main policies that shape the government’s efforts on promoting sustainable consumption?
- 1b) What are the main policies that shape the government’s efforts on implementing Education for Sustainable Consumption and consumer awareness raising?
- 2) Are there any specific definitions, criteria or benchmarks for “sustainable consumption” set by your department/organization (or by the wider government)?
- 3a) What are the main strategies for promoting sustainable consumption and responsible consumer behaviour that guide you department/organization’s efforts in this area?
- 3b) What are the main strategies for raising consumer awareness about sustainable consumption and implementing education for sustainable consumption?
- 4) Who are viewed as the main actors with responsibility for achieving sustainable development (i.e. circular economy, low-carbon development, green growth)? *Select all that apply and identify which actors have highest responsibility:*
- National Government
 - Local Government
 - Citizens/Consumers
 - Industry
 - Businesses
 - NGOs and Civil Society
- 6) What are the sectors of energy consumption that the government targets for improvement (ie. transportation, industrial, residential, commercial, agriculture, and electricity production)?
- 7a) What areas of consumer practice and consumption choices does the government target for improvement?
- 7b) Why these areas and how do the hope to encourage improvement?
- 8) What are existing programs or projects your department/organization is implementing to promote sustainable consumption and responsible consumer behaviour?
- 9) How successful have these projects been? Are there any specific measurements or statistics to demonstrate this success?
- 10) What are the main success factors of these projects? What are the main weaknesses?
- 11) What are the main constraints for the successful implementation of these sustainable consumption and education for sustainable consumption initiatives?
- 11) What are the main ways in which the government tries to engage consumers and encourage public participation in programs on Education for Sustainable Consumption?
- 12) Does the government partner with any civil society organizations/NGOs in their work on promoting sustainable consumption? What are the relationships of this form of cooperation?
- 13) What is your opinion of the existing institutional capacity of your department/organization for promoting sustainable consumption (and what is the existing institutional capacity of the wider government as a whole)?
- 14) How could governmental capacity for promoting sustainable consumption and implementing ESC be improved?

持続可能な消費行動と「持続可能な消費のための教育(ESC)」の推進にむけた

政府能力に関する調査研究

(財)地球環境戦略研究機関(IGES)¹は、今年度、日本、中国、韓国を対象に、持続可能な消費行動と「持続可能な消費のための教育(ESC)」の推進にむけた政府能力に関する調査研究を実施しております。日本の事例研究においては、東京都市大学(旧武蔵工業大学)環境情報学部との連携のもとで実施されております。

[1] 研究の背景

本調査研究は、北東アジア地域(日本、中国、韓国)における「持続可能な消費のための教育(ESC)」の質の向上とその効果的展開を目標としています。「持続可能な消費のための教育(ESC)」は、消費行動に直接影響を与えることによる持続可能な消費パターンの実現を通して、低炭素社会の構築への移行を促す取組です。そして、「持続可能な消費のための教育(ESC)」は、国連の10年計画としてその重要性が位置付けられている「持続可能な生産・消費(SCP)」のサブテーマとして取り扱われております。アジア太平洋地域においては、国連アジア太平洋経済社会委員会(UN-ESCAP)による、持続可能な生産・消費に関する円卓会議やグリーン成長イニシアティブなどの活動に見られるように、地域的な展開も見られています。

しかしながら、「持続可能な生産・消費(SCP)」の重要性に関する国際的な認識が高まっているにもかかわらず、いまだ、持続可能な消費行動の推進とその教育活動(ESC)は、まだ十分に実施されておられません。アジア太平洋地域においては、「持続可能な生産」に関する政策的取組は今日その進捗が見られますが、「持続可能な消費」に関する政策的取組はほとんどなされていないのが現状です。その背景には、持続可能な消費行動の推進や効果的な教育活動(ESC)の実施・展開における理解不足と実施能力の不足があると言えます。以上のような背景を踏まえ、本研究においては、日本、中国、韓国における「持続可能な消費」の推進にむけた政府の実施能力、政策、戦略に焦点を当てております。

[2] 研究の目的

本研究は、「持続可能な消費のための教育(ESC)」の効果的実施にむけた政府能力について調査をし、全体的なパフォーマンスの改善にむけた方策を明確にすることを目的としています。主要な調査方法は、適当な政府関係者に対する質問票調査とインタビュー調査を予定しております。とりわけ、本調査研究においては、持続可能な消費行動とその普及・啓発や教育活動(ESC)の推進にむけて、政府が有する主要な側面(適切な政策枠組み、全体的戦略、実施における阻害・推進要因など)について整理し、明確にすることを作業目的にしています。そして、これらの研究成果は、広範囲にわたる「持続可能な生産・消費(SCP)」と「持続可能な消費のための教育(ESC)」の間のより良い政策統合にむけた機会に活用することを予定しています。

上記の背景と研究目的を踏まえ、本調査研究に関するご理解とご協力をいただきますよう、よろしく願いいたします。

¹ 地球環境戦略研究機関(Institute for Global Environmental Strategies, IGES): 地球環境問題に取り組む国際的戦略研究機関。1998年に日本政府のイニシアティブによって設立。特定の国の利害にとらわれないグローバルな観点から、環境上適正で公平な社会を作り出すための政策や制度の提案を行う。2003年に国連経済社会理事会(UN/ECOSOC)の特別協議資格を取得。世界の中でも特に産業活動や人口が飛躍的に増大し、今後地球環境に大きな影響を及ぼすであろうアジア太平洋地域における持続可能な開発を主要な研究ターゲットとしている。

インタビューにおける質問項目

持続可能な消費行動の推進と「持続可能な消費のための教育（ESC）」の推進にむけた

政府能力に関する調査研究

The study of Governmental Capacity for promoting sustainable consumer behaviour and implementing Education for Sustainable Consumption

1a) 持続可能な消費の推進に関する政府の取組を具体化する主要な政策は何ですか？

Q.What are the main policies that shape the government's efforts on promoting sustainable consumption?

〔自由記述〕

→

1b) 「持続可能な消費のための教育(ESC)」と消費に関する普及啓発の実施において、政府の取組を具体化する主要な政策は何ですか？

Q.What are the main policies that shape the government's efforts on implementing Education for Sustainable Consumption and consumer awareness raising?

〔自由記述〕

→

2) “持続可能な消費”に関する特別な定義づけ、基準、ベンチマークなどが貴局・部課署（もしくは政府全体）で設定されていますか？

Q.Are there any specific definitions, criteria or benchmarks for “sustainable consumption” set by your department/organization (or by the wider government)?

〔自由記述〕

→

3a) 持続可能な消費と責任ある消費行動の推進において、貴局・部課署では何が主要な戦略になりますか？

Q.What are the main strategies for promoting sustainable consumption and responsible consumer behaviour that guide you department/organization's efforts in this area?

〔自由記述〕

→

3b) 持続可能な消費について関心を高め、「持続可能な消費のための教育(ESC)」を実施するには、何が主要な戦略でしょうか？

Q.What are the main strategies for raising consumer awareness about sustainable consumption and implementing education for sustainable consumption?

〔自由記述〕

→

4) 持続可能な開発(循環型社会・低炭素型社会・自然調和型社会)の達成にむけて責任ある主要なアクターは誰であると見ていますか？以下のアクターから選択(複数回答可)をし、もっとも責任が高いと見ているアクターを明示してください。

Q.Who are viewed as the main actors with responsibility for achieving sustainable development (i.e. circular economy, low-carbon development, green growth)? Select all that apply and identify which actors have highest responsibility:

- 政府機関 (National Government)
- 地方自治体 (Local Government)
- 市民・消費者 (Citizens/Consumers)
- 産業・工業 (Industry)
- 企業 (Businesses)
- 非政府組織と市民社会 (NGOs and Civil Society)

5) 政府が改善の対象としているエネルギー消費のセクターは何ですか？

次から選択をしてください(交通、産業、居住、商業、農業、電力生産)。

Q.What are the sectors of energy consumption that the government targets for improvement (ie. transportation, industrial, residential, commercial, agriculture, and electricity production)?

[自由記述]

→

6a) 消費活動と消費選択のどのような領域を、政府は改善のための対象としていますか？

Q.What areas of consumer practice and consumption choices does the government target for improvement?

[自由記述]

→

6b) なぜ、これらの領域において改善の促進を期待するのですか？またどのように促進するのですか？

Q.Why these areas and how do the hope to encourage improvement?

[自由記述]

→

7) 現在、貴局・部課署において、持続可能な消費と責任ある消費行動を推進するために実施しているプログラム/プロジェクトには何がありますか？

Q.What are existing programs or projects your department/organization is implementing to promote sustainable consumption and responsible consumer behaviour?

[自由記述]

→

8) どのようにそれらのプログラム/プロジェクトは成功し続けているのでしょうか？

それらの成功を明示するために何か特別な計量法や統計措置がありますか？

Q.How successful have these projects been? Are there any specific measurements or statistics to demonstrate this success?

[自由記述]

→

9) このプログラム/プロジェクトの主要な成功要因は何ですか？また、本プロジェクトの弱点は何ですか？

Q.What are the main success factors of these projects? What are the main weaknesses?

[自由記述]

→

10) 持続可能な消費とその教育的取組の効果的实施において、何が主要な制限要因になりますか？

Q.What are the main constraints for the successful implementation of these sustainable consumption and education for sustainable consumption initiatives?

[自由記述]

→

11) 政府が「持続可能な消費のための教育(ESC)」に関するプログラム/プロジェクトにおいて、消費者を巻き込み、一般市民の参加を促す点において、主要な方法には何がありますか？

Q.What are the main ways in which the government tries to engage consumers and encourage public participation in programs on Education for Sustainable Consumption?

[自由記述]

→

12) 持続可能な消費の推進にむけた業務において、政府は市民社会組織/非政府組織と協力していますか？またその協力体制はどのようなものでしょうか？

Q.Does the government partner with any civil society organizations/NGOs in their work on promoting sustainable consumption? What are the relationships of this form of cooperation?

〔自由記述〕

→

13) 持続可能な消費を推進するにあたり、現在の局・部課署の組織能力についての私見を述べてください。また、現在の政府全体としての組織能力について私見を述べてください。

Q.What is your opinion of the existing institutional capacity of your department/organization for promoting sustainable consumption (and what is the existing institutional capacity of the wider government as a whole)?

〔自由記述〕

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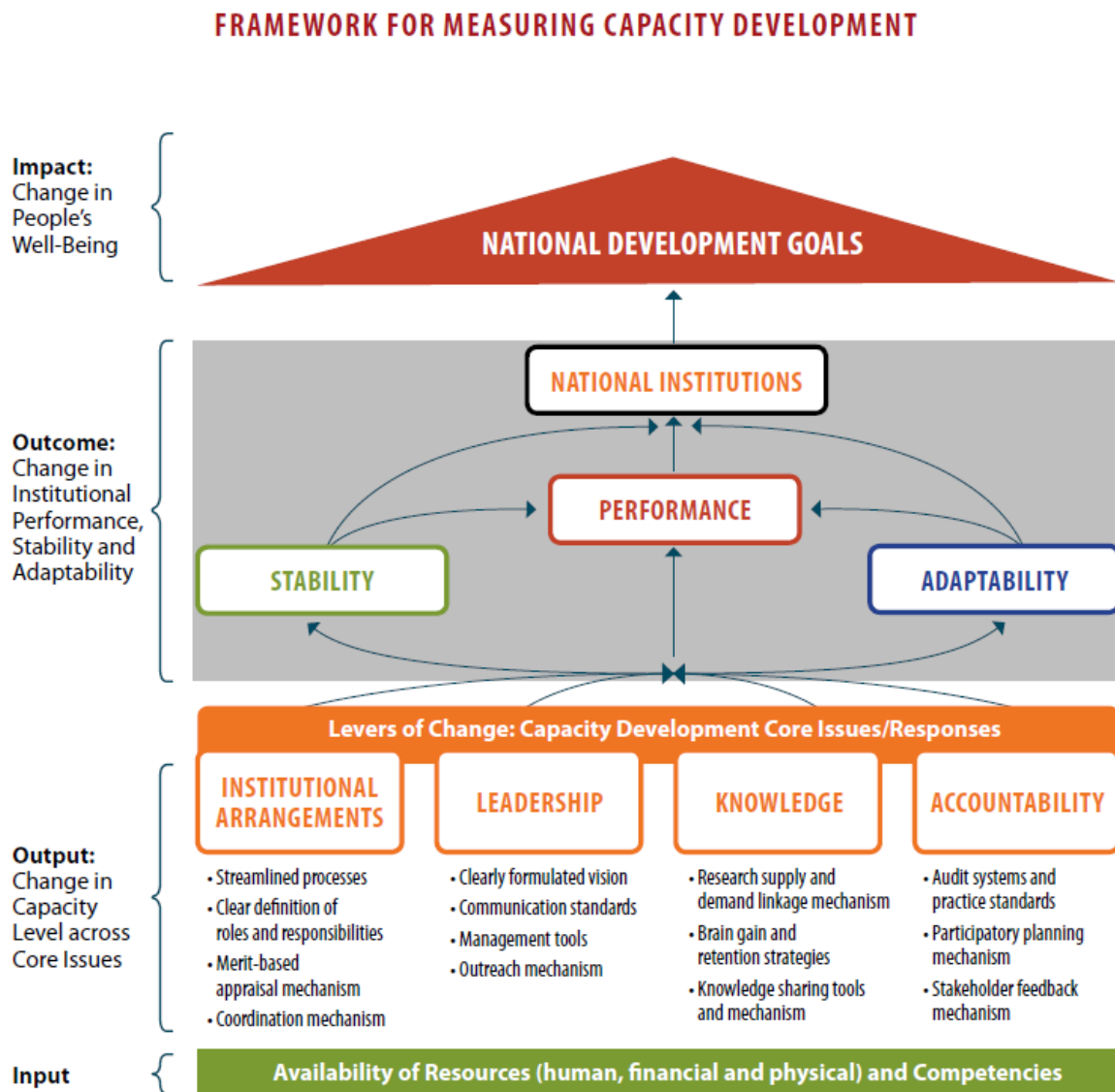
14) 持続可能な消費を推進し、「持続可能な消費のための教育(ESC)」を実施するためには、どのようにすれば、政府能力を改善させることができますか？

Q.How could governmental capacity for promoting sustainable consumption and implementing ESC be improved?

〔自由記述〕

→

APPENDIX 3: Full Framework for UNDP's Capacity Development Approach



Source: UNDP (2010) *Supporting Capacity Development: The UNDP Approach*. New York: UNDP.



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