

**EDUCATION FOR SUSTAINABLE CONSUMPTION IN NORTHEAST ASIA**  
**Strategies to promote and advance sustainable consumption**





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Northeast Asia (NEA) is a highly significant region of focus for achieving Sustainable Consumption and Production due to the increasingly large demand for energy and resources that have corresponded with the region's rapid economic growth and advancing development status. In particular, three countries in the NEA, i.e. China, Japan and Republic of Korea (ROK) are leading contributors to greenhouse gas emissions as shown by their ranks in the top-ten CO<sub>2</sub> emitting nations: China, Japan and ROK are first, fifth and ninth respectively. To address the urgent impacts current consumption practices have on climate change, the Capacity Development and Education (CDE) Project at the Institute for Global Environmental Strategies (IGES) in Japan has been conducting a series of Education for Sustainable Development (ESD) projects throughout East Asia. The CDE project has especially focused on Education for Sustainable Consumption (ESC) in NEA in this fiscal year, with main activities focusing on the three countries above.

According to UNESCO, "ESD aims to help people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decisions", and one of their ESD special themes is "sustainable consumption". ESC aims to help consumers understand what sustainable lifestyles are and encourage them to take practical action in their daily lives to consume sustainably. ESC is therefore also understood as one of the key ways to promote responsible environmental citizenship.

Nevertheless, despite the importance of ESC, it is not a simple challenge when we consider how a government can influence individuals' consumption patterns and lifestyles because of diverse and complex individual, societal and national contexts. Within this background, development of efficient strategies for ESC is critical to promote and advance sustainable consumption at national and regional levels. Furthermore, there is a lack of valuable research evidences on ESC not only in NEA but also world-wide. In particular, research on what national strategic mechanisms we can consider within indigenous, social and economical contexts is almost completely absent. As such, this report, *Education for Sustainable Consumption in Northeast Asia* focuses on strategies to promote and advance sustainable consumption, and as such has a high value in the fields of both ESC and ESD.

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## ABBREVIATIONS AND ACRONYMS

ACCU	Asia/Pacific Cultural Centre for UNESCO
ADEME	The French Agency for the Environment and Energy Management
ANPED	The Northern Alliance for Sustainability
CCN	Consumer Citizenship Network
CCP	Chinese Communist Party
CEEC	Center for Environmental Education and Communication, the Ministry of Environmental Protection, China
CGPN	China Green Procurement Network
CI	Consumers International
CIA	Central Intelligence Agency
CSD	Commission for Sustainable Development, UN
EAPP	Eco-Action Point Programme, Japan
EE	Environmental Education
EEB	European Environmental Bureau
EEPL	Environmental Education Promotion Law
EGG	Education for Green Growth
ESC	Education for Sustainable Consumption
ESD	Education for Sustainable Development
ESD-J	Japan Council on the UN Decade of Education for Sustainable Development
ESRCE	Economic and Social Research Council, the UK
GEN	The Global Eco-labelling Network
GDP	Gross Domestic Products
GHG	Green House Gas
GPA	Government Procurement Agreement
GPN	Green Purchasing Network
GTGSP	The Gobar Times Green Schools Programme
IGES	Institute for Global Environmental Strategies, Japan
IGPN	International Green Procurement network
ISO	International organization for Standardization
LCA	Life Cycle Assessment
DEFRA	The Department for Environment, Food and Rural Affairs, the UK
DESD	Decade of Education for Sustainable Development
IMF	International Monetary Fund
IUCN	International Unions for the Conservation of nature and Natural Resources
LOHAS	Lifestyles of Health and Sustainability
LOLA	Looking for Likely Alternatives
KEDI	Korean Education Development Institute
MEF	Ministry of Finance, China
KEITI	Korea Environmental Industry & Technology Institute
MEP	Ministry of Environmental Protection, China
MESA	Mainstreaming Environment and Sustainability into African Universities
MEST	Ministry of Education, Science and Technology, Republic of Korea
MEXT	Ministry of Education, Culture, Sports, Science and Technology

MOEJ	Ministry of Environment, Japan
NDRC	Then National Development and Reform Commission, China
NEA	Northeast Asia
NGO	Non-organisation
NPC	The National People’s Congress, China
NPO	Non-profit organisation
NTNU	The National Taiwan Normal University
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing Power Parity
RCE	Regional Centres for Expertise
SC	Sustainable Consumption
SCORE	The Sustainable Consumption Research Exchange Network
SCP	Sustainable Consumption and Production
STIP	Swiss International Programme
TSCP	The Taiwan Sustainable Campus Programme
UNCTAD	United Nations Guidelines for Consumer Protection
UN/DESA	United Nations - Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UN/DTIE	United Nations – Division of Technology, Industry and Economics
UNEP	United Nations Environment Programmes
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
WB	World Bank Group
WSSD	World Summit on Sustainable Development
WTO	World Trade Organisation
WWF	World Wildlife Fund
YCELP	Yale Center for Environmental Law and Policy



# SECTION I

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## **CHAPTER ONE**

### **INTRODUCTION: THE CASE FOR EDUCATION FOR SUSTAINABLE CONSUMPTION**

World-wide, the consumer class is growing at a rapid rate. “[T]here are now more than 1.7 billion members of ‘the consumer class’ today – nearly half of them in the ‘developing’ world. A lifestyle and culture that became common in Europe, North America, Japan, and a few other pockets of the world in the twentieth century is going global in the twenty-first” (Gardner, et.al. 2004: 4). The Asia-Pacific region has experienced the most rapid growth in the size of its consumer class and is now the largest regional consumer class in the world. The consumer class in this region now accounts for 29% of the world total, and it contributes 21.4% of global private consumption. Ironically, unlike the next two highest consumer regions of Western Europe and USA/Canada, the Asia-Pacific consumer class only accounts for just over a quarter (27%) of the regions entire population. Compare this to the consumer class in Western Europe being 89% of the region’s total population and 85% in USA/Canada (Gardner, et.al. 2004: 7-8). This means that in the Asia-Pacific region there is a much higher level of discrepancy that occurs between the high levels of consumption and the number of people with real purchasing power, and though the region is home to the largest consumer class in the world the majority of the people in this region still have little opportunity to participate in this newly realised consumer class.

Sustainable Consumption and Production (SCP) is promoted as an important means for mitigating the negative impacts of the growing demands of the global consumer class. SCP addresses concerns of resource management, energy efficiency, waste production and the equality of distribution. The promotion of SCP has its historical impetus in the Rio Summit of 1992 where it was first clearly defined. To support SCP, the idea of Education for Sustainable Consumption (ESC) has become a commonly promoted theme. ESC is rooted in more than mere information provision; it directly promotes active changes in consumer behaviour. ESC requires direct examination of how individuals (and society) choose to shape social and economic relationships. This further requires pedagogical changes to the way we learn, focusing on forms of active learning that encourage co-operation, dialectical thinking, and constructive problem solving.

The international promotion of SCP encourages governments to play a strong role in establishing sustainable consumption policies and influencing consumer behaviours. Jackson and Michaelis (2003) suggest that governments need to take a strong role in shifting policy away from the presumption that economic consumption is necessary for quality of life and by placing more emphasis on other contributors to quality of life (such as health, community engagement and meaningful work). “Government plays a vital role in shaping the cultural context within which individual choice is negotiated through its influence on technology, infrastructure, market design, institutional structures, the media, and the moral framing of social goods” (Jackson and Michaelis, 2003: 60-1). The *Planning for Change* report by UNEP and the Marrakech Process set out guidelines for establishing national programmes on SCP. This highlights the importance of SCP in the overall achievement of sustainable development, positions the call for SCP within the contemporary global challenges we are facing, and highlights several important reasons for developing national SCP programmes (see Table 1.1 for a full summary).

Education for Sustainable Consumption is one of main mechanisms for governments to encourage a shift in consumer behaviours towards sustainable consumption. The UNEP *Here and Now: Education for Sustainable Consumption* report (2008) explains that “The **basic learning outcomes** of ESC can be defined as attitudes, knowledge, skills and behavior leading to:

- Critical awareness
- Ecological responsibility
- Social responsibility
- Action and involvement
- Global solidarity” (Thoresen, 2008: 28).

ESC is unique because it takes an interdisciplinary approach and covers a wide variety of subject areas. Furthermore, viewed as a subset of the more general category of Education for Sustainable Development, ESC provides relevance to direct and practical actions that address contemporary concerns.

**TABLE 1.1 – TOP REASONS FOR DEVELOPING A NATIONAL SCP PROGRAMME**

<ul style="list-style-type: none"> <li>• SCP is focused, and thus, relatively easy to communicate and implement.</li> <li>• SCP is one of the main pillars of sustainable development.</li> <li>• Integrates supply (production) and demand-side (consumption) activities in coherent market strategy.</li> <li>• Uses life cycle thinking to ensure that problems are not pushed into other phases of the life cycle.</li> <li>• Seeks to achieve “win-win” outcomes through a multi-stakeholder setting.</li> <li>• Can help to attract funds from donors for projects (e.g. development organisations).</li> <li>• SCP targets business and industry – key players in achieving sustainable development initiatives can create jobs and investment and encourage social and business innovation.</li> </ul>
<p>from Bentley. <i>Planning for Change: Guidelines for national programmes of sustainable consumption and production</i>. 2008: pp. 22</p>

### 1.1 Mandate for Education for Sustainable Consumption in Northeast Asia

This chapter investigates the topic of Education for Sustainable Consumption (ESC) and attempts to provide a holistic and strategic approach for advancing its practice. The main objective of this chapter is to provide clear means for governments to implement effective ESC campaigns that increase consumers’ willingness and awareness to choose sustainable consumption options. During a regional workshop on ESC hosted by IGES in Beijing (July 2009), government officers from Japan, China and Republic of Korea agreed that there is a critical lack of governmental capacity for executing Education for Sustainable Consumption in the Asia-Pacific region specifically, and world-wide generally. It was further highlighted at this workshop that advancing ESC leadership and strengthening governmental capacity for executing ESC are priority concerns for achieving sustainable consumption and transition to a low-carbon society.

The governments of Japan, China and Republic of Korea have all provided mandates to governmental agencies to begin the promotion of responsible consumer behaviour for low-carbon society and to initiate educational campaigns on sustainable consumption. For instance, the Japanese Cabinet Office has established an ESC group in the Economic and Social Research Institute to provide support for the newly formed Consumer Affairs Agency to conduct this type of 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 Centre for Environmental Education and Communication, an agency of the Ministry of Environmental Protection in China, has been given the mandate to promote green consuming and initiate ESC campaigns. 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 Japanese organisation Green Purchasing Network and the Korean organisation Consumers Korea have both also expressed clear desires to implement ESC. However, though the political mandate and will-power exists to enact ESC programmes, they remain unformulated because of the current lack of capacity and leadership for ESC and the advancement of responsible consumer behaviour.

The development of ESC mechanisms and strategies also links closely with the United Nations Marrakech Process on Sustainable Consumption and Production (SCP) led by UNEP and UN-DESA. One of the four main policy themes that have been highlighted as areas of focus for the Commission on Sustainable Development (CSD) to address is “Changing Consumer Behaviour” through the application of policy instruments on consumer education and information provision. In 2010-11, CSD-18/19 will review the findings of the Marrakech Process and develop a Ten-Year Framework of Programmes (10YFP) on SCP. In the current draft of the 10YFP on SCP, education on SCP and sustainable lifestyles is identified as one of priority programmes to be elaborated upon (UNDESA/UNEP, 2009).

## **1.2 Key Concepts of Investigation**

### **1.2.1 Education**

Education is often conceived of in the narrow sense of formal education that occurs in schools and universities. However, in its broadest sense, education includes formal, non-formal and informal education. Formal education is recognised as the ‘education system’ and is usually hierarchically structured around curriculum based learning. Non-formal education in general is the structured educational activities that occur out-of-formal education. These non-formal educational activities would include professional training, community-based education and consumer education campaigns. Furthermore, non-formal educational activities are usually short-term, practical based and learner-centred but also with identifiable learning objectives. Informal education describes the life-long learning process that occurs through daily living and experience. Informal education can be bolstered with appropriate knowledge/information provision and with effective learning tools, though in technical terms once these activities incorporate specific learning objectives then it should really be considered non-formal rather than informal education (Infed, 2009). In regards to this chapter, the area of non-formal education is most important in considering how to increase consumer practice of sustainable consumption.

The idea of education considered in ESC is viewed from a non-traditional understanding that advances a new pedagogical theory for the focus and processes of education and learning as a whole. This incorporates a broad scope for education that includes both the teaching and learning of knowledge, skills, morals and behaviours that advance an individual’s development and socialisation.

The UNESCO Task Force on Education for the Twenty-first Century identified four main pillars of learning: learning to know, learning to do, learning to live together, and learning to be. Learning to know is the process of mastering learning tools and building the capacity to be a life-long learner. Learning to do focuses on occupational training and educating people to be valuable assets in their employment while also acknowledging the adaptive labour needs of the modern market. Learning to live together entails education into citizenship and social life thus providing individuals with the abilities to participate in cooperative communities. Finally, learning to be entails supporting the full development of each individual and their self-expression (Delors et al., 1996).

### **1.2.2 Sustainable Consumption**

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). 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 the consumption of some does not compromise the wellbeing of others;
- *Sustainable* – Without mortgaging the choices of future generations (UNDP, 1998: 1).

Modern consumption patterns are recognised as one of the leading causes of our current unsustainable patterns of growth and development, thus 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” (Thoresen, 2008: 8).

### **1.2.3 Education for Sustainable Development**

Education for Sustainable Development (ESD) is promoted as a process to engender a culture that is respectful to the core principles of sustainable development, and Education for Sustainable Consumption (ESC) is often identified as an important ESD component rather than a separate, stand-alone process. ESD is advanced as important social process as highlighted by the UN Decade of Education for Sustainable Development (2005-2014) (DESD) initiated with UNESCO as the lead organisation. UNESCO defines Education for Sustainable Development 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).

It is also considered that the concept of ESD adds a fifth pillar to the pillars of learning identified in *Learning: The treasure within* (Delors et al., 1996). The fifth learning pillar that ESD elucidates is referred to as ‘learning to transform society and change the world’. The objective of this fifth pillar is for individuals to gain the skills and knowledge to achieve lofty social goals such as social equality, non-discrimination, social solidarity, transition to a low-carbon society and to live sustainably (Shaeffer, 2006).

The main priorities of DESD have their roots in the objectives detailed for education in chapter 36 of *Agenda 21* (1992). Links are also to be drawn between efforts on DESD, the Millennium Development Goals (MDGs), Education for All (EFA), and the United Nations Literacy Decade (UNLD) (2003-12). 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, 2009a: 7).

One of the major challenges faced with ESD is the fact that it is a very diverse and complex subject. Some of the topics it incorporates are practical, while others can be highly theoretical and/or disconnected from daily life. For example, if we take the sixteen main principles of *The Earth Charter* (2000) as focal points for ESD then this requires broad sweeping criteria that shift between democratic participation and ecological restoration, from poverty eradication to universal health care. Of course, all of these issues are important if we want to achieve a shift to a sustainable society. Nonetheless, this provides a substantial challenge for providing a clear direction and pathway for sustainability learning and practice. In light of this challenge, sustainable consumption provides a practical topic of focus that allows for a deeper exploration of many of the thematic issues surrounding sustainable development.

#### **1.2.4 Education for Sustainable Consumption**

Sustainable consumption is a topic that most individuals can understand directly within the context of their daily lives, and thus sustainable consumption is a practical activity through which people can walk the talk of sustainable development. Education for Sustainable Consumption has a two-fold objective: first, to advance participation in sustainable consumption practices; and second, to provide a tangible entry into the wider 'philosophy' of sustainable development. Though ESC provides a specific topical focus, it also allows for and necessitates a broad investigation of social, environmental and economic aspects to truly understand what makes specific consumption practices sustainable or not. "In the great educational task towards the new cosmivision of a sustainable world, special weight is given to responsible consumption as there is a broad consensus on the role of consumerism or consumption as a lifestyle as the main driving force behind our unsustainable economies and cultures" (Wolfgang, 2009).

ESC is thus considered a part of ESD, and it is recognised as a very valuable arena for displaying feasible applications of the underpinning principles of ESD. The mid-term report for DESD expands on this idea:

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, 2009b: 50).

Sustainable consumption provides an educational topic for the wider theories of sustainable development from which the individual can apply direct practice to their daily life through sustainable consumption choices and in doing so begin to gain respect for the broader goal of transition to a sustainable society. “The main challenge in relation to education for sustainable consumption is how to support initiatives which stimulate the individual’s awareness of the central role they play in forming society and empower them to choose responsible, sustainable lifestyles” (Thoresen, 2008: 9).

Education for Sustainable Consumption (ESC) is investigated in this chapter as a primary means for advancing the proactive participation of individual consumers in sustainable consumption. Education is not viewed as the only means for promoting sustainable consumption, and in many cases regulatory or economic instruments may produce more immediate, if not all together more effective results. However, educational instruments, coupled with information provision, address the consumer as a free-willed individual whom has the right to choose to participate in sustainable consumption. Regulatory and economic instruments act upon the consumer directly through a command-and-control process, while education encourages a reflective self-transformation by the individual in his consumption practices. Similarly, there are many actors who can influence the process of consumption, but the consumer is recognised as the final primary actor where the actual consumption choice takes place.

Education for Sustainable Development, and ESC as a component of ESD, provides a reframed pedagogy of education as a process for engendering citizens with the ability to understand the relationships between themselves and the natural and social environments along with an ethic that supports betterment of society through sustainability. Education thus must not only be about information provision, but it requires the learning of advanced skills in systems thinking, critical analysis and participatory citizenship. In regards to sustainable consumption, ESC is the key element in increasing the self-awareness of consumers, advancing consumers’ independent sense of social responsibility, and stimulating their autonomous choice to actively participate in sustainable consumption. Beyond this more ethical/philosophical challenge for ESC, it also entails more functional knowledge in regards to the consumer learning the analytical skills to decipher what are sustainable and unsustainable consumption choices. The fact that ESC can include an array of functional knowledge to support an individual’s practice is one of the main reasons that ESC is such an important topic of focus for ESD. Thus, in this chapter, ESC is addressed first-and-foremost as a mechanism to increase individual participation in sustainable consumption, and secondly as a subsequent outcome to provide the means for an individual to begin to incorporate the principles of sustainable development into his or her everyday life.

Sustainable development, as a concept, does not promote a specific goal to be achieved or furthermore the idea of an end-state (in contrast to the modernity goal of a high consumption society). Rather, sustainable development promotes the idea of a process of “meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987). Development, in this definition, is a rationally guided social process that while though incorporating important environmental and economic components must begin and end with the human element and the conscientious choices we make.

This situation means that education, and more specifically education for sustainability, is a strategic function. In effect, the necessary “reconversion” of education towards sustainable development can

and must be a strategic factor which has an impact on the established development model so as to redirect it towards sustainability and equality (Martinez Huerta, 2009: 2).

In brief, education can provide us with the critical understanding, comprehension and knowledge to direct humanity's and society's development in a way that is sustainable for generations to come.

### **1.3 Regional Workshop: Securing cooperation on ESC in Northeast Asia**

The Institute for Global Environmental Strategies, with the support of Beijing Normal University and the Ministry of Environmental Protection in China, held a regional workshop/conference on Education for Sustainable Consumption in China, Japan and Republic of Korea from the 16<sup>th</sup> to 18<sup>th</sup> of July, 2009 in Beijing, China (see Choi, Tian and Didham, 2009 for workshop proceedings). The major aims of the regional workshop on Education for Sustainable Consumption (ESC) in the Northeast Asia were:

- Reporting *current status of Education for Sustainable Consumption (ESC)* in each country;
- Providing an opportunity to both ESC responsible policy-decision makers from governments and ESC experts from NGOs, universities and institutes in one place to exchange productive dialogues to make a narrow a gap between two arenas;
- Supporting future ESC policies and implementation regarding public education targeting consumers, and;
- Addressing government political roles for public education targeting consumers' choice in the Northeast countries and other countries with similar economic, political and cultural conditions.

The Regional Workshop on Education for Sustainable Consumption (ESC) provided a wealth of information centred on the investigation of policies and practical strategies to influence consumer behaviour towards sustainable consumption. A key focal point that evolved from this workshop was the identification of mechanisms for influencing consumption practices and consumer behaviour. The main discussions on this took two forms. First, the identification of the instruments and tools that are available to public bodies to build a strategy for consumer ESC upon were discussed. Second, consideration was given to the preconditioning factors and policies that shape consumer practices by shaping value/belief systems and by framing consumption opportunities.

Participants at the regional workshop also elaborated on good practice in ESC. These discussions became focused on the development of a policy strategy for promoting consumer-based ESC and encouraging sustainable consumption across the public sector. Though a clear strategy was not part of the outcome of this workshop, several important points were highlights. A primary feature of this strategy would be the recognition of the consumer as a socially responsible citizen who has an important individual role in affecting a transition to a low-carbon society. A second important feature encouraged by the workshops participants was the importance of inspiring people to believe in and commit to achieving a healthier and happier society that is filled with possibilities and opportunities. Sustainable consumption must not just be framed as a lessening of material being, though this is an unequivocal reality, but as a transition towards a society that fairly and equitably supports human well-being. The participants also recognised that a good strategy for consumer ESC must reframe the cultural and social ideologies of development and work towards those key moments for catalyzing a critical transition towards a sustainable society.

The findings from this workshop provided a valuable starting point and framework for the research that was conducted. The participants from China, Japan and Republic of Korea provided an outline of what they saw as necessary components of ESC and also with clear reports on the current status and deficiencies in national ESC and SCP policies. This workshop provided the main stimulus and rationale for pursuing an investigation of the main methods and mechanisms to influence consumer behaviour, especially from a governmental position. Furthermore, it also established the basic outline of the policy strategy for ESC implementation that is developed in the final section of this work.

#### **1.4 Current Priorities in Research on ESC Policy**

Education for Sustainable Consumption is a recently developing focus within the wider, though still juvenile field of Education for Sustainable Development. The research that has focused on ESC hitherto has been limited, and in most cases has been little more than documenting good practice cases. This is not to suggest that there is no benefit received from reviewing good practice, however the current state of research on ESC lacks any clear methods of evaluating and analysing the effectiveness of ESC practice.

For the implementation of effective ESC in policy and practice, it is necessary for research on ESC to clearly investigate and identify what are the primary components for influencing consumer behaviour and provoking a transition in consumption practices. There are also several arenas where ESC can be implemented, i.e. formal in-school curriculum, market-based and consumer oriented, community-based and civic oriented, etc., and each of these areas are worth further investigation for avenues to promote sustainable consumption. While ESD in general is often promoted in formal education, ESC has a unique quality of being directly relevant in the average person's daily life and thus lends itself to being an important way to promote sustainability through informal educational arenas.

UNESCO/UNEP provide guidelines for future research on ESC:

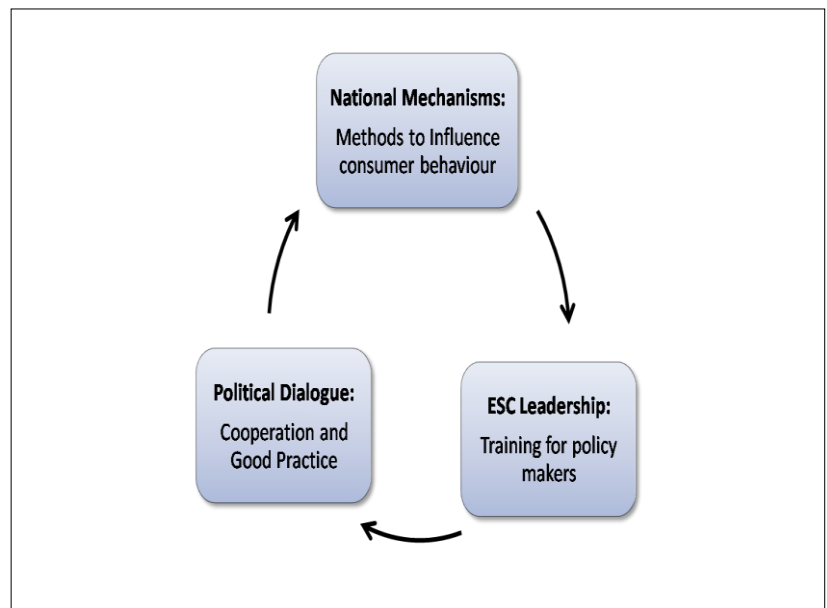
- Introduce sustainable consumption issues into school curricula, materials, and teacher kits.
  - Include indigenous knowledge on sustainable development and sustainable consumption, as well as media literacy into curricula and teaching materials.
  - Promote among education experts and governments the potential for developing curricula, which combine media education with environmental education.
  - Explore the possibility of developing more workplace learning activities on sustainable consumption for the young and the elderly.
  - Identify ways to involve young people in decision-making such as giving them seats on an advisory council of an institution.
  - Develop and implement an awareness raising campaign on sustainable consumption and shopping behaviour in collaboration with the advertising industry
- (UNESCO/UNEP, 2001: 195-6).



There are many opportunities for advancing sustainable consumption, and though the authors of this work would have liked to address them all it was necessary for the limits of our research to identify certain priorities for our ESC research.

The primary focus of research in this work is on how governments can advance ESC practice. Based on consultations with international and national specialists in ESD and SCP, we have identified three priorities for advancing governmental support of ESC (see Figure 1.1). The first priority is the identification of

**FIGURE 1.1 – RESEARCH ON GOVERNMENT ACTIONS TO ADVANCE ESC PRACTICE**



clear mechanisms that can be implemented from the level of national policy to influence consumer behaviour. The second priority is providing appropriate capacity building for policy-decision makers so they have the skills and understanding to implement effective ESC policy. The third priority is to increase political dialogues on ESC to secure cooperation and good practice, especially across the Northeast Asia region. As the second and third priorities are based in action that builds off the knowledge generated in priority one, it was chosen that this research would primarily focus on developing an understanding of the mechanisms for influencing consumer behaviour towards sustainable consumption. A secondary effort of this work is to provide a strategic framework that can be applied to strengthen both ESC leadership and political dialogues.



## **CHAPTER TWO**

### **METHODOLOGICAL FRAMEWORK OF POLICY REPORT**

The primary focus of this report is on Education for Sustainable Consumption with the goals of identifying good practice mechanisms and outlining a strategy for the effective implementation of ESC initiatives. These goals are aimed at supporting government initiatives for ESC. However, the outcomes of ESC initiatives also require consideration of the consumer as the primary actor of sustainable consumption and address how best to affect consumer behaviour. With this in mind, the primary question of this research was established as: *What is the government's role in influencing consumer choice through education for sustainable consumption?*

This report has been prepared with concern to three main policy objectives. The first objective is to analyse means for increasing sustainable consumption, with a specific focus on educating consumers about environmentally-friendly products and consumption practices. The second objective is to identify educational methods that prove successful in increasing the sustainable consumption and the purchasing of environmentally-friendly and eco-labelled products. However, it is also recognised that this must focus on the consumption of eco-labelled products where the alternative non-eco-labelled product was previously consumed, and avoid the trap of a general increase in the amount of consumption because the product is environmentally friendly, thus guilt free. Based on the above objectives, the third objective of this work is to detail the types of policies, programmes and activities the government can either implement or support to provide education for sustainable consumption and to encourage environmentally responsible consumer-citizenship. This work promotes the idea that governments are primary agents to strongly influence consumer choice through ESC by:

- 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.

This report is based on a multi-disciplinary approach that incorporates four main components. Throughout these components though, issues are addressed and analysed based on an original framework that is developed from an interdisciplinary understanding of the political, social, cultural and psychological conditions that frame individual consumption practices and the mechanisms for influencing individual consumer behaviour. The first main component of this report is a review of policy in order to understand the historical impetus for ESC and to examine how sustainable consumption can be encouraged at international, national and local policy levels. The second component of this work is an analytical review that begins with multi-disciplinary discussion of relevant theory and literature and concludes with the outlining of primary mechanisms to influence consumer behaviour through ESC which is used as a framework for analysis through the rest of the work. The third component of this report provides seven unique case studies regarding ESC policy and practice. The fourth component is an examination of eleven practice cases on ESC from China, Japan and Republic of Korea, and it provides a practical assessment based on the primary mechanisms of ESC identified in the second component. The final part of this work returns to the strategy initially outlined in the second component and attempts to strengthen this to level of

providing strong policy recommendations. An important part of this conclusion is the detailing of a strategy for implementing effective ESC initiatives.

## **2.1 Policy Review**

Chapter Three of this report addresses the political context and impetus for ESC. The chapter begins by outlining the international call first for sustainable consumption and production and second followed by the raising awareness for the need for specific initiatives on education for sustainable consumption. This further details the present understanding of ESC and the guidelines for its implementation. The second part of this chapter addresses the work of national governments to build integrated product policies. This is a recently emerging field that aims to reshape the entire processes of production and consumption by applying a life-cycle analysis. The third part of this chapter focuses on the work of local-level policy to practically promote eco-labels as a form of consumer information that can encourage sustainable consumption. The overall goal of this chapter is to provide a cross-sector analysis of how policy can and does promote sustainable consumption. This aims also to demonstrate the movement of policy from its theoretical formations to its practical applications.

## **2.2 Analytical Review**

Chapter Four provides a multi-disciplinary review of relevant theory and literature for understanding how consumer behaviour is effectively influenced. The first part of this chapter investigates the concepts of responsible environmental behaviour and environmental citizenship. This is done by contextualising these two concepts in the theoretical transition between environmental education based on mitigation and remediation measures to education for sustainable development based on the participatory formation of a sustainable society. The second part of this chapter examines how consumer practices are normalised and how behaviour is influenced. This utilises several psychological and economic theories to examine issues of consumer behaviour and consumer choice. The third part of this chapter examines the preconditioning factors that direct and limit patterns of consumption, and from this understanding the instruments that are available to governments to influence consumption practices are identified. This chapter also utilises social and collaborative learning theories, based in marketing studies, to explain how value-belief systems may be influenced.

The earlier parts of this chapter help build the initial outline of the primary mechanisms to influence consumer behaviour through ESC that is presented in the conclusion of this chapter. These primary mechanisms allow for the edification of an assessment framework which provides the basis of analysis for identifying the methods and means of good practice in the case studies presented in the forthcoming chapters. The identified mechanisms advance an understanding of how governments can influence consumer behaviour and how they can implement effective policy to advance civil society's autonomous participation in sustainable consumption.

## **2.3 Consultations and Country Cases**

Chapters Five to Eleven provide seven different case studies concerning ESC policy and practice. As part of a regional workshop/conference initiated by IGES on Education for Sustainable Consumption in the Northeast Asia region, several consultations were solicited and the resulting reports provide the core of these chapters. The first case study reviews the work at an international level to implement ESC programmes. The following three cases present the current policies promoting ESC in China, Japan and the Republic of Korea respectively. These policy cases provide a strong focus on green procurement due to the fact that this is the most advanced ESC policy in each country. The final three cases address areas of good practice regarding ESC in China, Japan and the Republic of Korea respectively. These cover a range of activities concerning formal and informal education activities.

## **2.4 Practice Cases on ESC from China, Japan, and Republic of Korea**

Chapter Twelve reviews eleven practice cases; respectively five from China, three from Japan, and three from the Republic of Korea. These cases all represent practical efforts to encourage sustainable consumption and include varying scales and differing levels of success in their attempts to educate consumers on sustainable consumption. An analysis of these cases is carried out utilising the five mechanisms for promoting sustainable consumption identified in Chapter Four.

From the analysis of these cases, it is possible to see how these mechanisms operate in practice. Noticeable differences among how the three countries implement consumer ESC are also identifiable, and comparisons can be drawn about levels of success each action has. Furthermore, from this analysis it is possible to make suggestions on how these different strategies could be strengthened through a more holistic treatment of these five mechanisms in policy and practice.

## **2.5 Policy Implications: Developing a Strategy of ESC Implementation**

The policy implications of the findings from the case study analysis are discussed in Chapter Thirteen. Both the general policy implications for implementing ESC and the specific lessons for each of the three countries are addressed in turn. Based on the understanding gained from utilisation of the primary mechanisms to influence consumer behaviour as an analytical framework, these mechanisms are further reviewed. From this process, it is possible to outline the strategic steps that should be included in the policy formation of ESC programmes. This outline is developed and explicated to produce a planning strategy for implementing effective consumer ESC campaigns.

## **2.6 Theoretical Framework**

The main goal of this work is to identify the mechanisms that governments may utilise to advance consumers' sustainable decision making/choices and to engender consumers' proactive participation in sustainable consumption. Government is addressed in this work as the primary actor for implementing ESC, while non-governmental and civil society agents are viewed as secondary actors. There are two objectives that correspond with this goal:

1. Identify the primary means to influence consumer behaviour and encourage consumer's proactive participation in sustainable consumption.
2. Elaborate the strategic policy steps required to implement successful ESC and consumer awareness raising campaigns.

To identify mechanisms to influence consumer behaviour and to promote sustainable consumption, it is necessary to investigate issues concerning both individual/personal choice and social/political infrastructures.

The critical review in this chapter takes an interdisciplinary approach. This approach is beneficial since it is necessary to review the influence on consumer behaviour in consideration of social conditioning factors, political instruments of influence, and personal behavioural change strategies. Consumption choices, though acknowledged as an aspect of individual free will, are preconditioned by numerous social and cultural patterns that often direct or limit consumers to unsustainable choices. When considering what are the primary mechanisms to influence consumer behaviour, a holistic approach must be taken to consider these aggregate factors. An empirical-analytical methodology is employed to investigate these diverse mechanisms' affect on consumer behaviour. This methodology develops from a post-positivist paradigm in order to delineate, compare and contrast these discrete variables (Connell, 1997: 122).

The investigation of the effectiveness of ESC initiatives is grounded in Habermas's *Theory of Communicative Action* (1981) and the methodologies of experiential learning. Building upon the critical theory of the Frankfurt School, Habermas was concerned with the process of self-reflection which allows people to become conscious of the socio-cultural determinants of meaning and understanding. However, Habermas breaks away from critical theory's pejorative stance that people are deluded into believing false consciousness as a form of oppression, and instead he postulates that through communication and deliberation we elucidate mutual understandings. McCarthy summarises the importance of communicative action as, "Establishing relations through the exchange of illocutionary acts make it possible for speakers and hearers to achieve mutual understanding about their courses of action, that is, to cooperate rather than compete in important areas of life" (1994: 265).

Habermas's idea of communicative rationality is provided as a direct contrast to the earlier ideas of instrumental rationality and functional rationality as the main systems for structuring cultural evolution. "*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). Communicative rationality provides a theoretical model that allows us to understand how the change in meaning and culturally-defined belief systems can occur through engagement in consensus-oriented communication. Furthermore, Habermas details how 'ideal speech types' can be used to strengthen democratic participation, and how institutional changes can substantially increase the ability for individuals to act together as equals. For this research, this theory of cultural evolution and adaptation of belief systems through a process of evaluating and reformulating socio-cultural values collectively provides a deeper understanding of how ESC can affect a wider social transformation for sustainable consumption practice.

The theoretical position utilised in this research can also be paralleled with the Freirian concept of 'conscientisation', or the forming of critical consciousness, through efforts to allow individuals to

create their own self-direction and to cooperate collectively to create a shared understanding of reality (see *Rahman, 1995: 25*). To support this position, the methodologies of experiential learning theory and a general appreciation of social learning theory provide a basis for analysing the effectiveness of ESC implementation. The experiential learning theory, originally discussed by Kolb and Fry (1975), defines learning as, “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Kolb, 1984: 41). Zuber-Skerritt simplified the explanation of the four stages of the experiential learning cycle as: plan, act, observe and reflect (1992: 11). Establishing the type of continuous learning cycles, described as part of experiential learning theory, during ESC initiatives allows each individual to employ methods of investigation and critical reflection to create his own understanding of the imperative for sustainable consumption.

## **2.7 Applied Methodologies**

The review of the case studies in Chapter Twelve employs provides a statistical analysis of eleven cases. The cases are reviewed in regards to framework of primary mechanisms to influence consumer behaviour. Initially, each case is qualitatively evaluated in terms of performance and accomplishments in regards to all twenty-six aggregate categories of the five primary mechanisms. This evaluation allows for a quantitative comparison among the eleven cases to be developed. The assessment of the case studies is supported by an empirical-analytical methodology. This methodology develops from a post-positivist paradigm in order to delineate, compare and contrast these discrete variables (Connell 1997, 122).

The selection of practice cases was strengthened by the snow ball method which allows for the expansion and improvement of research criteria through the process of reference and consultation from one expert to the next (Denscombe, 2003:16). A series of expert reviews was applied to the development of the analytical framework, the identification of aggregate assessment criteria, and the selection of practice cases. For instance, the Regional Workshop on ESC in China, Japan and ROK provided for the collection of three policy reports and review of the initial assessment framework for the primary ESC mechanisms (see *Choi, Tian and Didham, 2009 for the workshop proceedings*).





## CHAPTER THREE

### POLITICAL CONTEXT AND IMPETUS FOR ESC: INTERNATIONAL, NATIONAL AND LOCAL PERSPECTIVES

The purpose of this chapter is to provide a historical and political context for the research on education for sustainable consumption that is presented in the following chapters of this work. This chapter reviews the concept of education for sustainable consumption in regards to the political support it has received. The international consensus that developed over the last two decades in support of SCP and the expanding recognition of the importance of ESC is first presented. Next, the work of governments at a national level to develop integrated product policies is investigated. The third topic in the policy review focuses on the development of eco-labels and their usage as a direct, local provision of consumer information.

#### **3.1 International Consensus on Education for Sustainable Consumption**

The concept of Sustainable Consumption and Production (SCP) has a strong historical impetus. Internationally, SCP was first outlined in “Chapter 4: Changing Consumption Patterns” of *Agenda 21* – revealed at the Rio Earth Summit on 14<sup>th</sup> June 1992. Two main objectives were outlined in this chapter:

- To promote patterns of consumption and production that reduce environmental stress and will meet the basic needs of humanity
- To develop a better understanding of the role of consumption and how to bring about more sustainable consumption patterns (1992: 4.7).

This chapter also provides a broad outline to further SCP through international cooperation, national policy and further research. Governments, private research and policy institutes, and economic and environmental organisations were called upon to provide research concerning:

- Expand or promote databases on production and consumption and develop methodologies for analysing them;
- Assess the relationship between production and consumption, environment, technological adaptation and innovation, economic growth and development, and demographic factors;
- Examine the impact of ongoing changes in the structure of modern industrial economies away from material-intensive economic growth;
- Consider how economies can grow and prosper while reducing the use of energy and materials and the production of harmful materials;
- Identify balanced patterns of consumption worldwide which the Earth can support in the long term (1992: 4.10).

Governments were also called upon to reinforce values that support sustainable consumption through education and public awareness programmes. It was suggested that in the future this would be an area to monitor and assess the development of national policies for (1992: 4.26).

The Earth Summit+5 conference held in New York in June 1997 did not directly address issues of SCP, but the importance of education for sustainable development was a topic discussed by the Assembly. The magnitude of SCP was renewed in 2002 at the World Summit on Sustainable Development (WSSD) in Johannesburg when sustainable consumption and production was identified as one of the three overarching priorities for the realisation of sustainable development (along with poverty eradication, and protection/management of the natural resource base) in the *Plan of Implementation of the World Summit on Sustainable Development* (UN-WSSD, Sept. 2002: III). This

plan called for a ten-year framework of programmes to support SCP that along with several policy initiatives would include clear educational activities:

- 15.d) Develop awareness-raising programmes on the importance of sustainable production and consumption patterns, particularly among youth and the relevant segments in all countries, especially in developed countries, through, inter alia, education, public and consumer information, advertising and other media, taking into account local, national and regional cultural values;
- 15.e) Develop and adopt, where appropriate, on a voluntary basis, effective, transparent, verifiable, non-misleading and non-discriminatory consumer information tools to provide information relating to sustainable consumption and production, including human health and safety aspects. These tools should not be used as disguised trade barriers (Sep. 2002: III).

The impetus of the Johannesburg Conference led to the meeting of the UN Commission on Sustainable Development (CSD-11) in April 2003 to push forward work on a 10-Year Framework of Programmes (10YFP) on SCP with progress to be reviewed in 2010-11. CSD-11, or the Marrakech Process, held from 28<sup>th</sup> April to 9<sup>th</sup> May 2003 was a planning and technical session to discuss further implementation of Agenda 21 and the decisions from WSSD. Along with establishing a 10-Year Framework, there are three main goals of the Marrakech process:

- to assist **countries** in their efforts to green their economies
  - to help **corporations** develop greener business models
  - to encourage **consumers** to adopt more sustainable lifestyles
- (UN-DESA, internet: 2008).

This meeting was followed in June 2003 by the First International Meeting of Experts on Sustainable Consumption and Production, also held in Marrakech. Five phases of development were identified to work towards the 10YFP: 1) regional consultation, 2) production of regional strategies for SCP, 3) implementing projects and programmes to develop/improve SCP tools and methodologies, 4) monitor and evaluate process and progress, and 5) multistakeholder inputs on the elaboration of the 10YFP. The final review of the 10YFP and the launch of the policy framework are to occur at UN Commission on Sustainable Development (CSD18/19) during 2010/11 (UNEP-DTIE-SCP branch, internet: 2008). Paul Hofseth of the Ministry of Environment of Norway explains, "The Marrakech Process has a value in itself. It is a Process that, while leading towards a 10YFP, is much more than a steppingstone. It is a substantive dialogue and forum for cooperation on SCP issues among and between governments and other stakeholders at international and regional levels" (UNEP-DTIE-SCP branch, internet: 2008). The work of the Marrakech process has identified and developed opportunities and good practice that will enrich the formation of the 10YFP on SCP over the following two years.

Seven task forces have formed to further the Marrakech process through policy initiatives, research activities and pilot projects. The two task forces that apply directly to this work are "Education for Sustainable Consumption" (led by Italy) and "Sustainable Lifestyles" (led by Sweden). To date, the Sustainable Lifestyles task force has: produced a literature review on sustainable lifestyles (Scott, March 2009), established classroom pilot projects, worked on the UNEP/UNESCO YouthXchange programme, developed a toolkit for marketing and advertising courses, and established the Creative Communities for Sustainable Lifestyles project which has included local-level training initiatives in Brazil, India and China (UN-DESA, internet: 2008). The Education for Sustainable Consumption task force has developed a set of guidelines *Here and Now, Education for Sustainable Consumption* (2008), developed a database with Consumers International for ESC, have collected 'good practice'

cases and worked to define a set of indicators for monitoring and evaluating of ESC (UN-DESA, internet: 2008).

The guidelines established in *Here and Now* aim at supporting both policy makers to incorporate ESC into existing education and sustainable development strategies and educators to strengthen ESC in curricula. In part one of these guidelines, it explains to policy makers why sustainable consumption and education for sustainable consumption are important issues. A series of policy recommendations are then outlined, and it is suggested that these be implemented over a four year period (see Table 3.1). It is also put forth that the minimum amount spent on ESC in primary and secondary schools is one hour per week (Thoresen, 2008:10-2). In part two, the focus is on implementation of ESC in education programmes and the development of an ESC core curriculum. This covers specific themes and topics regarding sustainable consumption, but it also discusses techniques for integration into established disciplines and curriculum. A wide range of short case studies are also presented to demonstrate projects of good practice. Finally, the document provides a discussion of ESC methodologies and explains why it must be considered a process of relearning.

Education for sustainable consumption is an opportunity for reorganizing information and how this information is understood in larger contexts. It provides a chance to reconsider such central questions as the meaning of life, the value of material and non-material prosperity, and the significance of service to one's fellow human. It also opens for reflection about the positive and negative aspects of accepted economic and social systems (Thoresen, 2008: 30).

**TABLE 3.1 – POLICY RECOMMENDATIONS FOR ACHIEVING ESC**

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|---|
| <ol style="list-style-type: none"> <li>1. <b>Ensure</b> that education institutions reflect in their daily management the priorities given to sustainable development</li> <li>2. <b>Include</b> themes, topics, modules, courses and degrees about education for sustainable consumption in established curriculum.</li> <li>3. <b>Encourage</b> research in education for sustainable consumption-related areas.</li> <li>4. <b>Strengthen</b> connections between researchers, lecturers, teacher trainers and socio-economic actors and stakeholders.</li> <li>5. <b>Enhance</b> cooperation between professionals from diverse disciplines in order to develop integrated approaches to education for sustainable consumption.</li> <li>6. <b>Facilitate</b> teaching and teacher-training which strengthens global, future-oriented, constructive perspectives within education for sustainable consumption.</li> <li>7. <b>Reward</b> creative, critical, innovative thinking related to education for sustainable consumption.</li> <li>8. <b>Ensure</b> that education for sustainable consumption respects the importance of indigenous knowledge and recognizes alternative lifestyles.</li> <li>9. <b>Foster</b> intergenerational learning as an integrated aspect of education for sustainable consumption.</li> <li>10. <b>Provide</b> opportunities for practical application of theoretical study through social involvement and community service.</li> </ol> |
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from Thoresen. *Here and Now, Education for Sustainable Consumption*. 2008: pp. 11

In the Asia-Pacific region, a regional help desk on SCP (based in Beijing) was launched by UNEP and UNESCAP in 2006 in order to, “enhance the strategic and participatory design and implementation of successful SCP policies” (SCP-Help, internet: 2007). UNESCAP also launched the Green Growth policy initiative as a result of the fifth Ministerial Conference on Environment and Development in Asia and the Pacific, held in Seoul in March 2005. Policy dialogues and forums are held regularly regarding Green Growth in the Asia-Pacific region to “establish ecologically sustainable, economic progress to foster low-carbon, socially inclusive development” (UN-ESCAP, internet: 2002). Green Growth is based on the idea of transitioning from an industrial economy to a sustainable economy, however it

also identifies an intermediate step for present efforts to move towards an eco-efficient economy before a sustainable economy may be reached. Economic instruments such as eco-labels, eco-tax reform, green procurements and product stewardship tools are identified as key measures for increasing resource productivity (UN-ESCAP, 2006: 20-30). Finally, education for sustainable development is marked out as a means for achieving eco-efficiency of consumption, alongside promotion of environmentally-friendly goods and services and the promotion of the 3 R's – reduce, reuse, recycle (UN-ESCAP, 2006: 14).

The above review demonstrates a strong historical impetus for education for sustainable consumption that has mainly developed since WSSD in 2002. In fact, the 2010 and 2011 remain crucial for producing strategic evidence based on ESC research as a build up to the implementation of a 10YFP on SCP as the result of the Marrakech Process. There remains significant scope to examine how the international policy that is reviewed here is enacted as ESC programmes, especially at national and local levels.

**TABLE 3.2 – THE HISTORICAL IMPETUS FOR ESC IN INTERNATIONAL POLICY**

<ul style="list-style-type: none"> <li>• <b>1992, June</b> – Rio Earth Summit: SCP is outlined in “Chapter 4: Changing Consumption Patterns” of <i>Agenda 21</i></li> <li>• <b>2002, September</b> – World Summit on Sustainable Development: SCP is identified as one of the three overarching priorities for the realisation of sustainable development in <i>Plan of Implementation of the World Summit on Sustainable Development</i>.</li> <li>• <b>2002, September</b> – WSSD also provides call for the development of a 10-Year Framework of Programmes on SCP and identifies the need for education initiatives to be part of policy.</li> <li>• <b>2003, April-May</b> – Meeting of UN Commission on Sustainable Development (CSD-11) initiates the Marrakech Process to produce a 10YFP, and includes the goals of: <ul style="list-style-type: none"> <li>▪ <i>to assist <b>countries</b> in their efforts to green their economies,</i></li> <li>▪ <i>to help <b>corporations</b> develop greener business models,</i></li> <li>▪ <i>to encourage <b>consumers</b> to adopt more sustainable lifestyles.</i></li> </ul> </li> <li>• <b>2003, June</b> – First International Meeting of Experts on Sustainable Consumption and Production at which the formation of seven task forces are initiated to further the Marrakech process through policy initiatives, research activities and pilot projects. <ul style="list-style-type: none"> <li>▪ Connected to ESC are: “Education for Sustainable Consumption” (led by Italy) and “Sustainable Lifestyles” (led by Sweden).</li> </ul> </li> <li>• <b>2008</b> – ESC task force develops a set of guidelines <i>Here and Now, Education for Sustainable Consumption</i> (author: Thoresen).</li> </ul> <p><b><u>In the Asia-Pacific Region:</u></b></p> <ul style="list-style-type: none"> <li>○ <b>1997</b> – The first annual Asia Pacific Roundtable on Sustainable Consumption and Production is held</li> <li>○ <b>2005</b> – UNESCAP launches Green Growth policy initiative as a result of the fifth Ministerial Conference on Environment and Development in Asia and the Pacific,</li> <li>○ <b>2006</b> – UNEP/UNESCAP launch a regional help desk on SCP.</li> </ul>
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### 3.2 Government Work with Integrated Product Policy

Integrated Product Policy (IPP) is a new approach to environmental and product policy being utilised by governments to establish a holistic strategy for 'greening' the market. IPP addresses issues of the market in regards to both product development and consumption, respectively the supply side and the demand side. While traditional product-oriented environmental policies focused on point sources of pollution and 'end-of-pipe' solutions, IPP applies the reverse strategy by beginning the policy process at the 'front-of-pipe'. This requires a focus on product research, development and design in order to reduce the non-point source problems before they exist. A life-cycle approach is enabled for this type of analysis. "IPP represents a new and very promising approach to environmental protection," explained Environment Commissioner Margot Wallström. "IPP will look at all the stages of a product's life cycle from cradle to grave and seek to reduce the overall environmental damage it causes at the different stages. The gains that can be made by making just small changes are huge" (European Union, IP/03/858: 18 June 2003). The usage of the IPP terminology is strongest in Europe, but parallels may also be drawn with Green Growth policy in Asia.

Life-cycle analysis must cover a long period of time in terms of an individual product and consider a widerange of complicated factors. These include the resources and energy consumed and the wastes produced throughout the design, manufacturing, assembly, distribution, purchase, usage/consumption and final disposal of the individual product. "IPP considers the product development process from idea generation to product management and reverse logistics (i.e. 'end-of-life' management [EOLM])" (Charter, et. al., 2001: 98). A life-cycle approach covers all product systems and their environmental effects, thus it avoids shifting environmental problems from one product stage to another (Frey, et. al., 2000).

Integrated Product Policy is to serve as a policy framework to bring together and provide coherence between existing policies and objectives under an ultimate goal of sustainable development procurement. In a study commissioned by the European Commission, Ernst and Young (March 1998) provided one of the earliest detailed descriptions of IPP and outlined its five building blocks:

- Transmitting environmentally-relevant information about products up and down the product chain;
- Managing wastes;
- Creating markets for green goods;
- Developing the innovation of more environmentally-sound products (Life Cycle Assessment-based Design for Environment tools); and
- Allocating responsibility along the life cycle  
(cited in Schmidt, 2000: 73).

Furthermore, IPP is based on three fundamental principles: market orientation, stakeholder involvement and life-cycle perspective (Charter, et. al., 2001: 103). IPP also promotes a range of innovative concepts for product development including life-cycle thinking, stakeholder involvement and holistic usage of diverse instruments (*see Table 3.3 for a full description of these concepts*).

Stakeholder involvement is held as a priority in IPP. Participatory Integrated Assessment and stakeholder dialogue play important roles in identify key areas/issues and conceptualising routes for improvement. "Stakeholder dialogue is a form of problem structuring, i.e., the identification, confrontation, and – where possible – integration of the most divergent views with respect to a given problem situation" (Hisschemöller, et. al., 2001: 62). There are three main benefits to this approach. First, different views are highlighted and analysed – a task that cannot be done by

modeling alone. Second, this process can initiate learning thus generating new insights and concepts. Third, stakeholder involvement often leads to greater commitment towards the issue/challenge at hand (Hisschemöller, et. al., 2001: 63).

**TABLE 3.3 – INTEGRATED PRODUCT POLICY AIMS TO PROMOTE**

<p><b>Life-cycle thinking:</b> Previous product policies have tended to focus on large point sources of pollution and have tackled them in isolation. Life-cycle thinking considers a product ‘from cradle to grave’. This should reduce the overall environmental impacts and avoid shifting them from one part of the life-cycle to another.</p> <p><b>Working with the Market:</b> Setting incentives to move the market in a more sustainable direction encourages the supply and demand of greener products. Policies should reward companies that are innovative, forward-thinking and committed to sustainable development.</p> <p><b>Continuous Improvement:</b> Reductions on environmental impacts can always be made at some point in a product’s life-cycle. IPP does not generally favour limit values or minimum achievement standards, rather it requires producers to constantly look for potential improvements.</p> <p><b>Stakeholder Involvement:</b> The diverse actors and stakeholders, such as designers, industry, marketing people, retailers and consumers, should play an active role in IPP.</p> <p><b>A Mix of Instruments:</b> There is not one ideal instrument for IPP. Various tools should be applied where they are most appropriate and in the best possible combinations. These tools include measures such as economic instruments, substance bans, voluntary agreements, environmental labelling and product design guidelines.</p>
<p>from European Union, MEMO/03/136: 18 June 2003</p>

Another key concept in IPP is the aim of continuous improvement. Because IPP attempts to influence policy for all products and services, it is impossible to set quantified targets for everything. Rather, the goal of constant improvement is used and this hopefully avoids the contradiction of producers improving to meet minimum standards and then relaxing. Interestingly, this goal of continuous improvement is a critical feature in sustainable development as a whole due to the fact that meeting needs in a sustainable manner in an ever evolving system requires constant adaptation, thus it is quite beneficial that IPP holds it as a key aim for product development.

The side of IPP that focuses on demand and consumption is of particular interest for this research as this is the side that more specifically deals with consumer behaviour. “IPP also aims to green the consumption side of the market by focusing on the way that customers (individual, business-to-business, distributors and governmental) choose, use and discard products and services” (Charter, et. al., 2001: 98). To investigate areas for improvement in regards to consumption, Frey et. al. argue that Ecological Footprint (EF) methodology provides a powerful tool for measuring the environmental impact of a product’s usage, consumption and final disposal (especially in regards to semi-permanent, electrical goods such as white goods). “[EF] is a flexible tool which helps visualise the resource consumption on a product level (bottom up approach)” (2000: 134). Information provision is identified as an important tool for greening the consumption side of the market – this is based on the belief/hope that informed consumers will be influenced to practice sustainable consumption if they are aware of possible environmentally responsible purchasing choices. EF provides information in an easily understandable and visual format that could allow for rapid comparison between similar products by individual consumers.

IPPs promote eco-labels as an important information tool for influencing individual consumer behaviour. However in regards to eco-labels, “it is now understood that such policy instruments rarely work efficiently if they are not part of a wider policy approach” (Charter, et. al., 2001: 104). Through the use of IPP though, the impacts of eco-labels can be strengthened by applying a series of supporting measures. Public campaigns for consumer education can be linked with market strategies for the uptake of eco-labelled products. While governments can also ensure that eco-labelled criteria hold to a certain rigor and direct policies at the production side to ensure that consumer trust in eco-label programmes is well founded.

One of the current difficulties facing IPP deployment is establishing a balance between traditional ‘command and control’ regulations and the usage of voluntary, market based instruments such as eco-label programmes. There is of course need for an integrated application of both approaches in a manner that compliments each other, however difficulty has existed towards identifying legislative means to support voluntary mechanisms. “For too long, the Type I Ecolabel, particularly the European scheme, has operated in isolation against a back-drop of uncontrolled self-made claims” (Allison and Carter, Sept 2000: iii). IPP should identify how various instruments, such as economic, regulatory and information instruments, can create supportive benefit towards the overall goal of SCP. For example, green public procurement policies and environmental taxation can both be utilised to strengthen and secure eco-label programmes.

IPP has also been joined with the idea of eco-innovation – a process of product and service development that is based on a direct examination of functional needs required by the consumer and the provision of this function in the most eco-efficient manner possible. Though this may not appear that innovative at first glance, it differs highly from standard product development that focuses on improvements to the design of a product and incremental changes. The eco-innovation process works towards the goals of function innovation and system innovation. This can produce significant improvements for sustainable product development that serve consumers’ needs and requirements in the most efficient manner and without gross excesses of consumption. “[E]co-innovation needs to be accompanied by an in-depth understanding of the needs of consumers today, but more importantly in the future” (Nuij, 2001: 50). Considering what products and services people actually need and what will truly enhance their quality of life is at the core of eco-innovation, while research and development that focuses on production of a expanded range of products and the provision of further material consumption possibilities (though once a goal of the market system) may now be seen as directly contrary to the goal of sustainable consumption.

Integrated Product Policies provide a framework for conceptualising and reviewing all product-related environmental initiatives and can significantly encourage SCP. It can also be a specific support for ESC programmes by providing a holistic examination of the various factors that drive consumer behaviour. Consumer decision-making may be argued as the most critical factor in achieving SCP because all other activities of production and consumption are primarily viewed as meeting consumer desires. However, what the IPP framework accounts for that other policies have not is that multiple instruments exist for directing consumer behaviour towards sustainable consumption. The provision of a more eco-efficient product that best serves a consumer’s needs not only results in a primary lessening on the environmental impact of that consumption choice but may also lead to a secondary impact on the consumer’s future behaviour and examination of personal

needs. Furthermore, IPP can provide the transition towards a system where sustainable consumption choices are the predominant opportunities.

### 3.3 Eco-Labels as Consumer Information

The usage of Eco-Labels as a communication tool to provide information about the environmental impact of specific product (and more recently – service) consumption choices has expanded and improved over the past two decades. The earliest example of eco-labels is the Blue Angel programme in Germany that started in 1977. Eco-labels have developed into important communication tools for encouraging sustainable consumption and supporting corporate social responsibility.

“[T]he value of an ecolabel should not be viewed exclusively within the context of its impact on a specific production process or purchasing pattern, but in a more holistic way as a catalyst for change in corporate and consumer cultures. If consumers or companies are prompted by an ecolabel to consider the environmental impacts of one range of activities, they can reasonably be expected to consider the possible impacts of other activities as well” (UNEP, 2005: 11).

Eco-label programmes cover a wide range of usage, but this means there is often limited conformity between different types of labels. As a communication tool to encourage sustainable consumption, there is still considerable scope for improving the quality of eco-label programmes and their affects on sustainable consumption practices. A brief introduction to the various types of eco-labels that exist and explain how they individually communicate information is needed.

First, the difference between an eco-labelled product and a product that is designated as environmentally friendly must be noted. The simplified explanation is that an eco-label is a formal and trustworthy provision of information, while a product being called environmentally friendly (or a range of other green claims) is an informal marketing description by the producer/distributor and is not specifically trustworthy. However, the division is not that simple, and to understand better we must start with the International Organization for Standardization’s defining of 3 types of environmental performance labelling.

**ISO Type I** – Voluntary, multiple-criteria based, third party programmes that award a license that authorises the use of environmental labels on products indicating overall environmental preferability of a product within a particular product category based on life cycle considerations;

**ISO Type II** – Informative environmental self-declaration claims;

**ISO Type III** – Voluntary programmes that provide quantified environmental data of a product, under pre-set categories of parameters set by a qualified third party and based on life cycle assessment, and verified by that or another qualified third party (Global Ecolabelling Network, internet: 2008).

Those labels traditionally referred to as eco-labels fit into the Type I category, while informal marketing descriptions like environmentally friendly would be classified as Type II. Energy-efficient reporting for white goods, such as the Energy Saving Labelling Programme in Japan and the China Energy Label, are examples of Type III labels, however the provision of Type III labels has been made mandatory by some national governments and the European Union. Type I labels provide a quick reference of assurance that a product meets a minimum standard for environmental protection, though these standards may vary widely between different eco-labels. Type II labels usually provide single topic information that could be of significant interest for the consumer, such as “CFC free” or “less polluting formula”, but there is usually no assurance of credibility for these claims. In this work, research on how ESC can increase sustainable consumption practices will focus



specifically on ISO Type I eco-labels due to the fact that they provide reliable information in a simple pictorial format which assumes that the consumer will have pre-knowledge of the label if it is to influence individual choice.

Often eco-labels are assessed on their economic merits and the incentives they provide to producers because they are a market tool and judged under those standards. However, eco-labels do not always provide a strong economic incentive, but this does not limit their purposefulness or positive affect for sustainable consumption. This is often the case with government required labelling schemes such as ISO Type III labels, and it is argued by some that this is good reason to extend the requirement of these labels to include a wider range of products. There are two main economic incentives that are recognised for adopting ecolabels: the impact on profit margins and the impact on the predictability of future revenues. Concern has arisen over the fact that the market price premium of eco-labels are often not maintained, especially as the market evolves to meet growing demands and the original eco-labelled product loses its niche market. Also, in many cases the price premiums paid for eco-labelled products benefit the seller to a much higher percentage than the producers.

Now that many eco-label programmes are well developed, it is beginning to be noticed that for producers they are benefitting more from the long-term supply contracts and the resulting stronger relationship between producer-supplier-seller than they do from the price premium. "While there is a significant amount of anecdotal evidence suggesting the increasing importance of procurement policies and preferred-supplier contracts and the theoretical underpinnings are sound, the data on which to base a more comprehensive policy analysis is inadequate" (UNEP-DTIE, 2005: 18). It is also argued that eco-labelling provides a more profound mechanism to affect the behaviour of manufacturers and corporations than regulations do because it does not control the manufacturers but rather gives them the responsibility for competing in the market with products based on best practice (D'Souza, 2004). A further benefit serving producers who adopt eco-labels is the growing usage of 'green' public procurement policies by governments which can provide a more secure and substantial market than mere dependence on consumer choice.

Eco-labels have now existed and developed as a market mechanism for consumer information provision for over three decades. However, it is recognised that little quantified research has addressed the influence eco-labels have had, and furthermore the evidence that is utilised in support of eco-labels is most often anecdotal. There is a need for improved and expanded research on eco-labelling that directly distinguishes and analyses the differences in criteria between various labels and the resulting environmental impacts this leads to. There also exists a clear lack of research on how consumers are properly educated about the general significance of eco-labels and their connection with sustainable consumption and production. "The absence of independent, quantified data on the effectiveness and impacts of ecolabelling is not an exception in the field of policy analysis... [T]here currently appears to be a disconnect between the relative importance ascribed to ecolabelling as an environmental policy tool and the amount of investigation and analysis being carried out in regard to its design" (UNEP-DTIE, 2005: 2). The cited authors also call for the enhancement of a clear classification framework for understanding eco-labels and their differing criteria. Further research on eco-labels should have three aims. First, to provide a better understanding of why some types of eco-labels work and others fail. Second, to develop effective

incentives for relevant actors along the value chain to encourage eco-label adoption. Third, to produce assessment tools for monitoring the effectiveness of achieving objectives for eco-labels (UNEP-DTIE, 2005: 39).

Due to the fact that eco-labels are highly visible on products, there has been little research on how consumers are best educated about eco-labels or environmental performance labels. This approach is flawed in that it is necessary to assume that consumers who base their behaviour on the influence of a specific eco-label do so with existing pre-knowledge of the meaning of that label. An important factor to consider is what pre-knowledge must exist for a consumer to choose a product because it is eco-labelled, assuming that the eco-label carries with it a meaning that the consumer understands and relates to. This thus leads us to the investigation of how eco-labels play an important role in consumer ESC strategies. “The main challenge in relation to education for sustainable consumption is how to support initiatives which stimulate the individual’s awareness of the central role they play in forming society and empower them to choose responsible, sustainable lifestyles” (Thoresen, 2008: 9).

The main purpose of eco-labels as they relate to wider ESC strategies is to provide trusted information regarding individual products so that the consumer does not need to research every single potential product purchase, but rather he/she must only understand the imperative for sustainable consumption and also believe that a given eco-label (regardless of the individual product it is on) distinguishes the consumption choice that is most sustainable. This demonstrates why education on eco-labels should be situated within the context of wider ESC strategies, and must not only consider how to strengthen awareness of individual labels but also the sustainable consumption imperative. It is also important to consider how to create consumer trust in individual eco-labels so that it becomes an influence across a diverse range of consumption choice. Campaigns to increase consumer trust in individual eco-labels should be holistic in nature and focus on:

- establishing rigorous criteria for product labelling;
- ensure high quality of products;
- provide public education on the qualities of the eco-label and the environmental benefits of consuming labelled products;
- provide marketing for eco-labelled products;
- build a monitoring and evaluation system to ensure maintained rigor of criteria, and;
- provide access to full transparency of labelling procedures.

Finally, it is also necessary to investigate how eco-labelling programmes may be strengthened and secured out with the market system. A study by OECD identified the following four factors in the success of the Blue Angel programme:

- campaigns by consumer organizations and the media, particularly the local media and specialized press;
  - targeting some product category labels at professional purchasers;
  - public procurement policies that support the Blue Angel programme; and
  - anticipated consumer preferences
- (OECD, 1997).

Governments may also provide incentives and subsidies to eco-label programmes and the consumption of eco-labelled products through a variety of means that allow eco-label programmes a certain amount of protectionism when they first enter the competitive market. On the opposite side of the production-consumption continuum, producers may also be supported to make the transition

to the production techniques and processes that are required to receive an eco-label. This approach is of significant importance in regards to improving production in low income and middle income countries for products that are consumed in high income countries because there are substantial opportunities for high income countries to provide financial, technological and training support. Examples for this come from the work being done by the EU Ecolabel Marketing for Products team to provide support for transitioning to green production, especially regarding the increase of textile products from China and Indonesia that are produced in a manner that meets the criteria for the EU Ecolabel (Scherlofskyst, 2008).

### **3.4 Conclusions**

The review of policy support for ESC highlights the importance of both ESC and SCP in current policy dialogues and also as primary concerns for achieving wider sustainable development. Furthermore, it demonstrates that there are several different policy routes for advancing consumer participation in sustainable consumption. Though this work takes a specific focus on improving and advancing ESC policy and its practical implementation, it must be recognised that the end goal of these activities are to strengthen consumers' proactive participation in sustainable consumption and responsible lifestyles.

The promotion of SCP through policy can occur in many different ways. Regulations and economic incentives are very effective instruments for advancing clean production practices and providing value to specific types of consumption. Education for Sustainable Consumption is a more specific activity though, and as one means for moving towards SCP it is a process that must focus on directly influencing consumer behaviour and choice while encouraging active participation in sustainable consumption. However, current policies on SCP lack clear identification of mechanisms and strategies to promote responsible consumer behaviour.

Efforts are made in policy to promote and to increase opportunities for sustainable consumption. Better information provision on the impacts of consumption practices is being developed. Nonetheless, ESC policy faces an impediment due to the fact that there is little understanding of how policy (and its resulting practice) can directly influence consumer choice and lead to conscientious changes in behaviour. Thus, the main efforts of this report are aimed at identifying clear mechanisms and strategies for advancing governmental capacity to influence consumer behaviour through ESC.



## CHAPTER FOUR

### THEORETICAL REVIEW: THE MECHANISMS FOR PROMOTING SUSTAINABLE CONSUMPTION

This chapter reviews several theoretical concepts that provide a critical understanding for advancing strategies for Education for Sustainable Consumption. The ideas of Environmental Citizenship and Responsible Environmental Behaviour are first reviewed to position the concept of sustainable consumption within a wider lifestyle framework. Next, the concepts of consumer choice and behaviour change, based in marketing and economic theories, are examined to provide an understanding of how education may affect a transition towards sustainable consumption. Third, the means available to governments to influence consumers are examined. Based on the review made in these previous sections, the chapter concludes with a clear detailing of the primary mechanisms to promote sustainable consumption. This provides a framework of assessment that will be used in the investigation of ESC practice cases in the later part of this report.

#### 4.1 Responsible Environmental Citizenship

Responsible environmental behaviour – the idea of an individual or group acting in a manner to alleviate or lessen environmental issues/problems – has been promoted as a goal of environmental education (EE) since the early formations of EE curriculums. While the idea of environmental citizenship is a recent addition to the discussions of environmental education and education for sustainable development (ESD). The interesting difference between responsible environmental behaviour (REB) and environmental citizenship (EC) is that the former is mainly about remediation and mitigation activities, and the later is concerned with the participatory formation of a sustainable society. This ideological change from avoiding negative outcomes to producing positive outcomes is also noticeable in the shift from EE to ESD as a whole. Ashley clarifies these two distinct strands of education as “education *about* the environment” and “education *for* the environment”. Education *about* the environment (or EE) concentrates on raising awareness for environmental problems, while education *for* the environment (or ESD) focuses “more strongly upon the question of pro-environmental behaviour change, and the values that might underpin this” (2000: 131).

The *Rio Declaration* provided one of the earliest calls for connecting the idea of citizenship to sustainability.

Rio Declaration, Principle 10:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided (UN General Assembly, 1992).

Environmental citizenship invokes a sense of rights and duties, much like that of national citizenship, but it also extends beyond social and national boundaries to encompass a global environmental perspective (UNEP-DTIE-IETC, 2003: 1). Furthermore, the concept also engenders ideas of participation in decision-making processes, an ideal of social justice, and the necessity of conscientious action on the individual’s part to pursue sustainable development.

A further difference that is apparent between REB and EC is the level of change that must occur in the individual actor to embrace these roles. In regards to REB, the actor may require education about the environmental problems that he/she should try to avoid and the potential actions that will remedy negative behaviour. However, the REB actor requires very little shift in his or her perception of the world around him/her. This may be contrasted with the practice of environmental citizenship which requires an extensive shift in our understanding/learning, ideology/beliefs, and relationship with fellow man and with nature. This is akin to the ancient Greek notion of *paideia* – education into citizenship – which was distinguished from the education for learning skills and a trade. *Paideia* was seen as providing the means for an individual to reach his true form and to fulfill his place in society, and this was marked by the belief that one did not merely become a citizen but that he was molded into the culture and ideologies of his society. In his work, Ashley argues that it is not merely knowledge that leads to changes in behaviour, but that it is values that principally guide action (2000: 132).

Responsible environmental behaviour, in this case, does require more than mere awareness raising. Though REB has been a goal of environmental education, it is possible to acknowledge a limitation in most EE strategies for producing the type of values and empathy that is required to achieve this goal. “Too few EE programs incorporate serious attempts to develop ownership and empowerment in learners. Again, these educational efforts typically focus only on the awareness level” (Hungerford and Volk, 1990: 17). Education to promote responsible behaviour and environmental citizenship must go beyond topical information and must build the skills of inquiry, analysis and participation in order for individuals to take direct, conscientious action for themselves. However, as Hungerford and Volk identify, “One of the serious impediments to the kind of instruction recommended... is the fact that it differs substantially from typical educational practice” (1990: 17).

The concept of environmental citizenship not only incorporates this ideal of empowered participation, but it requires cooperation with one’s fellow citizens to decide appropriate courses of action. The spirit of cooperation and participation revived in the concept of EC is facilitated by a link with the idea of deliberative democracy. Discourse and deliberation are held by many as a key to the renewal of real democratic possibilities. John Dryzek explains, “Deliberation as a social process is distinguished from other kinds of communication in that deliberators are amenable to changing their judgements, preferences, and views during the course of their interactions, which involve persuasion rather than coercion, manipulation, or deception” (2000: 1). The idea of deliberative democracy (Dryzek, 2000 and Goodin, 2003) centres around the idea of active discourse as a fundamental of citizenship, and that as a requirement of ‘good citizenship’ individuals must be willing to openly engage in political debate.

The participatory practices involved in EC may be viewed as an educational experience in their own right. In deliberation, individuals must investigate, analyse and form conclusions for themselves, however they are also informed by the knowledge of others they communicate with and from their direct experiences. This process establishes a form of ‘critical praxis’ – defined by Ledwith as the, “unity of theory and practice” (2005: 1). Critical praxis occurs when people learn to participate in development activities, to engage in reflective inquiry in regards to their own action, and to formulate new views and opinions about the world they live in. The outcome of critical praxis is a “practical knowledge grounded in everyday experience” (Ledwith, 2005: 28).

Environmental citizenship, as a formative process, aims not only to educate an individual but to structure their values and practices to support sustainable development. Governments can and should inform their citizens by:

- providing mass media with appropriate and important information on local environment issues;
- preparing and disseminating environment-related information materials, such as brochures, pamphlets, posters, bulletins, and other printed matters in their vernacular language, and widely circulating and posting them in public places frequented by people, such as schools, bus stops, inside buses, toilets, churches, city hall, and so on;
- organizing community assemblies to share information, consult citizens on their views about critical local environmental issues, and engage them in more direct dialogues to solicit their support of proposed actions;
- opening an internet website to disseminate information and encourage open discussions, if the communities already enjoy a degree and level of information technology use (UNEP-DTIE-IETC, 2003: 3).

In order for environmental citizenship to lead to responsible behaviour, it is important that the individual is informed, empowered and able to participate in decision-making processes. In regards to sustainable consumption, consumers are viewed as individual actors, however the consumer is also limited by a series of mitigating constraints that he has little control over or influence to change. When considering how ESC can influence wider behaviour, the individual is limited by a more extensive set of constraints since he is often unable to participate in meaningful decision-making processes about the society he lives in. Lacking this level of participative capacity corresponds with a decrease in feelings of empowerment and well-being (see *Frey and Stutzer, 2005*) thus leading to a level of apathy that is unproductive for sustainable development. Furthermore, participation opportunities can result in a stimulus for self-education as people desire to make informed choices when the opportunity for meaningful outcomes is present (see *Benz and Stutzer, 2004*).

The importance of participation in decision-making processes as an empowering tool for inspiring responsible environmental citizenship should not be overlooked and places a major responsibility on governments, especially at the local-level, if they want to support individual practice for sustainable development. “The building blocks of environmental citizenship are informed citizens, an enabling government, and the partnership between them or the shared spirit of cooperation and commitment between citizens and their governments to protect and conserve the environment” (UNEP-DTIE-IETC, 2003: 3). When we consider that many challenges sustainable development must deal with are about our patterns of living, our behaviours regarding production and consumption, and our relationships to other human beings and the natural environment, the promotion of responsible environmental citizenship should be viewed as a priority objective of public policy.

#### **4.2 Consumer Choice and Behaviour Change**

The primary objective of Education for Sustainable Consumption is to affect individual behaviour and value-beliefs in order to encourage consumer choices that support transitions in daily life towards a low-carbon society. The choices that an individual consumer makes can and do have significant effects on environmental quality, especially when the number of consumers is multiplied significantly. In fact, some argue that most production activities are directed by end-user consumption choices, and thus the majority of unsustainable practices are the result of individual consumer behaviour. “In this way, sustainable consumption is clearly identified as a tool for

practising ecological citizenship – requiring individuals to make political and environmental choices in their private consumption decisions” (Seyfang, April 2005: 292).

The above sentiment presents the individual consumer as a critical actor in reaching sustainable development through his/her consumption choices. Though this is the case, it must also be acknowledged that many various agents can influence and shape consumer choice. “Ordinary consumers have little knowledge of the links between consumption patterns and their consequences, and have little real power to affect the market place. In a highly industrialized society, knowledge and responsibility are so diffused among economic actors that no one really feels responsible” (Heiskanen and Pantzar, 1997: 409). Lack of knowledge and responsibility are also coupled with a lack of empowerment and awareness for affecting change, so even those individuals who hold pro-environment values and want to take responsibility may not recognise how they can do so.

When we ask the question “how can governments work to transition to sustainable consumption and production?”, we are met with a range of policy opportunities. Governments can work with the production, industry, agriculture and energy sectors to influence change, and they can also build infrastructure that will provide for better efficiency. However, this deals mainly with sustainable production, and when we consider solely sustainable consumption there is no substantial alternative of focus besides affecting consumer choice and behaviour. Thus, if SCP is to lead to a low-carbon society, then the consumption choices made by the end-user should in many ways be the starting point for policy work. In the work *Securing the Future (2005)* outlining the U.K. government’s sustainable development strategy, a new approach for government affecting consumer behaviour towards sustainable consumption is presented. This is a five point strategy:

1. **Enable** – remove barriers that discourage sustainable consumption, provide facilities and infrastructure that encourage sustainable consumption, educate and give information about how to consume sustainably;
2. **Encourage** – establish measures to encourage and reward good behaviour, discourage and penalise bad behaviour, and enforce action when necessary;
3. **Engage** – involve the public, communicate and campaign, utilise media resources, stimulate community action;
4. **Exemplify** – lead by example and achieve a policy consistency
5. **Catalyse** – building from the other four points, make major shifts in social and cultural habits to break old habits and kick start change

(adapted from HM Government. *Securing the Future*. March 2005: Ch. 2, pp. 24-41).

It is also worthwhile to distinguish the general variations of policy types available:

- Command and control,
  - Market-based policies,
  - Education,
  - Provision of information, and
  - Voluntary measure
- (Dietz and Stern. 2002: 4).

To understand what the government is trying to accomplish when influencing consumer behaviour towards sustainable consumption, we must not only look at the government’s role but also investigate how and why consumer behaviour is affected. Let us first consider what is happening when an individual buys an environmentally-friendly or an eco-labelled product. First and foremost, as an actor he has been motivated by some driving value or ethic, and in this case a desire to protect the environment. Second, he will hold a corresponding belief that buying environmentally-friendly products is an active means for an individual to help protect the environment. Finally, there must be



some trust placed in the information conveyed by the specific product and its label for the consumer to assume that the purchase of that product helps to achieve the previous two objectives. Initially, this process of sustainable consumption is driven by some type of value-motivation.

Clearly understanding and explaining consumer behaviour and consumer choice when it is directed by this type of value-motivation is a difficult task. There are many available models of consumer behaviour, but they all fall short in explaining variance of behaviour among differing consumers. It is out-with the scope of this review to detail these numerous models, nor will it provide benefit. Rather, consumer behaviour models are briefly presented here to provide a theoretical insight in to how and why consumers change their consumption patterns. The Value-Belief-Norm theory of pro-environmental behaviour (Stern, *et.al.*, 1999) provides one of the strongest basis for analysing shifts in consumer behaviour towards sustainable consumption. This work builds off of Schwartz's Norm Activation model (1977), and links it to environmental value theory. The Value-Belief-Norm theory postulates that pro-environmental values, an awareness of the consequences of one's actions, and an ascription of personal responsibility can lead to the acceptance of a new environmental paradigm. Through this process, an individual moves towards developing a personal norm for pro-environmental behaviour (Stern, *et.al.*,1999: 84-6). Even though this model is considered one of the strongest for explaining pro-environmental behaviour, it still can only account for 35% of the variances between personal norms and indicators of pro-environmental behaviour (Jackson, Jan. 2005: 58).

This type of model provides benefit for understanding how behavioural changes come about and also demonstrate the importance that values can play, but for the research focus of this work what will prove more useful is understanding what types of values can support a pro-environmental behavioural change. From his work on the effects of values on human behaviour, Schwartz proposed ten motivational value types:

- **Universalism** – understanding, appreciation, tolerance, and protection for the welfare of all people and for nature,
- **Benevolence** – preservation and enhancement of the welfare of people with whom one is in frequent personal contact,
- **Tradition** – respect, commitment, and acceptance of the customs and ideas that one's culture or religion impose on the individual,
- **Power** – attainment of social status and prestige, and control of dominance over people and resources,
- **Security** – safety, harmony, and stability of society, of relationships, and of self,
- **Conformity** – restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms,
- **Achievement** – personal success through demonstrating competence according to social standards,
- **Hedonism** – pleasure and sensuous gratification for oneself,
- **Stimulation** – excitement, novelty, and challenge in life,
- **Self-direction** – independent thought and action-choosing, creating, exploring (Schwartz, 1992: 5-12).

Cialdini's Focus Theory of Normative Conduct (1990, 1991) provides recognition of the importance social norms can play in shaping our behaviour. The focus theory distinguishes two types of norms: *descriptive* – informing our own behaviour based on what we experience others doing, and *injunctive* – behavioural constraints based the conceived moral rules and guidelines of a social group (Jackson, 2005: 59-60). This is significant because it demonstrates that though individual behavioural

change is often based on achieving value learning on a one by one basis, if a critical mass of people who demonstrate pro-environmental behaviour forms then this can have a much larger effect by becoming a conditioning social norm.

A major difficulty to understanding how values affect consumer behaviour is the fact that in the market only purchases count or register desires. It is highly feasible that there are people who hold pro-environmental values but are blocked from expressing these in their consumer actions due to multiple barriers that are present in regards to sustainable consumption, including affordability, availability, convenience of product, feeling of powerlessness in effecting change. It is also important to note that overarching social and institutional structures can effectively lock consumers into specific consumption patterns. "Hence while ecological citizens struggle to use their limited influence to transform the market through mainstream channels, the constraining institutional factors which delimit the choices available are being reproduced societally, and the major consumption decisions are being made out of the public eye, away from market pressures" (Seyfang, April 2005: 297).

This review of theories of consumer behaviour attempts to demonstrate areas where avenues for influencing a shift towards sustainable consumption exist. What is clear is that value-motivations and pro-environmental orientations must be a key area of focus in policy activities. Governments should work to alleviate the barriers to and provide further opportunities for sustainable consumption. However, working to educate, communicate and campaign about the environmental imperative and its connection with sustainable consumption will need to be at the core of any sustainable development agenda. What remains less clear and suggests a needed area for further research is how do people learn new values and incorporate them into their way of life.

### **4.3 Influencing Consumption Practices**

Consumption practices in modern society are most often explained from a perspective of rational utilitarianism which holds the individual as the sole actor in the process of consumption. This not only leads to a position where the role social factors, marketing and governance can play in directing consumption practices becomes difficult to identify, but it has also left governments afraid of interfering with individual consumer sovereignty based upon the belief that utilitarianism within the marketplace is the driving factor for achieving a greater good. Furthermore, under the free-market approach of modern economics, the idea of being a 'good citizen' became inextricably linked to a mandate for regular consumption (Hobson, 2002). As the links between environmental problems and society's consumption and production practices are distinguished, it is becoming increasingly clear that unrestricted utilitarian individualism is actually at fault of rendering discussions of "collective good" or "civic duty" politically mute. Now that the goal of sustainable consumption and production is accepted as a universal necessity, it is critical that we deconstruct the philosophical shackles of utilitarianism from the idea of a greater societal goal for sustainable development. Cooperation and participation are pivotal to the ethos of sustainable development and SCP, and it is important that the rationalisation of individual behaviour and practice is not the sole determining factor that people are directed by.

The achievement of SCP will require the partnership of all of the various actors involved in the processes of consumption and production: producers, retailers, public institutions/government, mass media, NGOs, academia, and of course the consumers. It is also critical that any analysis of the key stakeholders involved in the processes of SCP acknowledges the importance that social factors and infrastructures play in influencing consumer behaviour. Furthermore, the goal of transformative change towards SCP must be situated within the historical pretext that the public/private sectors have long endorsed a drive for increased consumption under the misconstrued belief that this type of growth is synonymous with development. Sanne suggests that in many cases consumers are locked-in a work-and-spend lifestyle by the conditions that are deliberately promoted by businesses and producers (2002: 286). Policies for SCP will need to address not only how businesses produce but also the significant role they play in directing consumer practices, much like the backlash against the tobacco industry for its previous marketing practices. Governments need to not only recognise how social infrastructures define specific consumption possibilities but also the ability they have to influence the values that guide individual behaviour.

Campaigns of consumer education for sustainable consumption will most likely be at the lead of the public sector, though NGOs and businesses are also potential supporters (for the scope of this work, we will focus on governments as the primary actor in public education for SCP). First, it is necessary to consider what should be the key ideas present in a campaign of public ESC. There are several key focal points for ESC initiatives that can be identified:

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

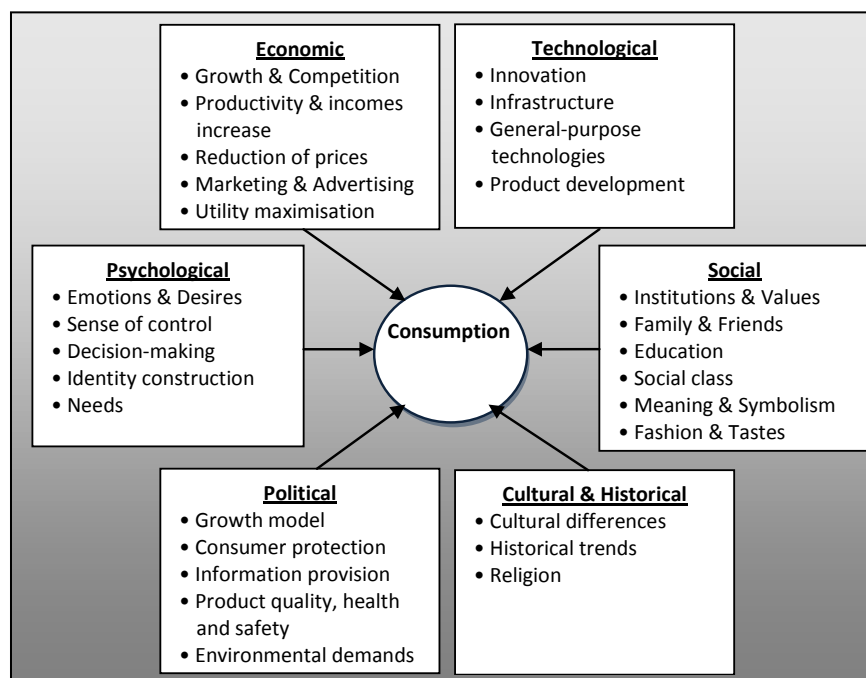
“The overarching challenge regards the role of communication and education in supporting and promoting and normalizing visions of sustainable lifestyle” (UN-DESA, internet: 2009). This is a strategy that must be based on rewarding and encouraging good behaviour rather than punishing bad behaviour. This type of positive, transformative action is much more difficult for governments to enact with the same level of success that they have in establishing policies for punitive, ameliorative actions.

Second, it is important to detail the means available for influencing consumption practices and consumer behaviour. There are two aspects that must be considered in regards to this. One, it is necessary to examine the various drivers that provide preconditions for consumption practices. Two, the various tools and controls that governments can utilise to alter consumer behaviour should be identified. Patterns of consumption and production have been significant forces in shaping the structure of modern civilization. Thus, it is also the case that modern practices of consumption are framed and shaped by a series of centuries old preconditions. In the UN-DESA report *Sustainable Lifestyles and Education for Sustainable Consumption*, these preconditions are classified into six drivers: economic development, technological progress, political settings and policy actions, cultural and historical contexts, social factors and conditioning, and psychological motives (internet: 2009). An examination of these drivers provides insight into the various factors that may shape a consumer's decisions and lead to a scenario where an individual cannot express his preferred behaviour. These drivers can be analysed for both the level of certain types of behaviours they promote and for the barriers they produce that limit the opportunities for sustainable consumption

by locking consumers into specific patterns of consumption (see Figure 4.1 for further detailing of the drivers for sustainable consumption). Enabling the practice of sustainable consumption requires not only the removal of such barriers, but also the expansion of clear and easy opportunities for practicing consumption in ways that are sustainable.

There are a number of tools and controls that the government can utilise to encourage SCP. These can be classified into a series of instrument types: regulatory instruments, economic instruments, educational instruments, cooperative instruments, and informational instruments (Tyson, ed., Aug 2006). Regulatory instruments are mainly used to enforce minimum standards. Economic incentives may include negative taxing, positive subsidies and green procurement strategies. Educational instruments include research/development, production training, and public education activities. Cooperative instruments focus on improving production processes by delivering technology transfer and voluntary agreements. Informational instruments are mainly aimed at providing consumers

**FIGURE 4.1 – DRIVERS FOR CONSUMPTION AND LIFESTYLES** (prepared by UN-DESA, internet: 2009)



information about products through eco-labeling, sustainability reporting, environmental quality targets, and consumer advice. The purpose of the government utilising a broad variety of instruments to influence consumer behaviour is to ensure that ideas of sustainable consumption are well integrated into existing socio-economic and value structures, thus providing multiple supports and stimuli for SCP.

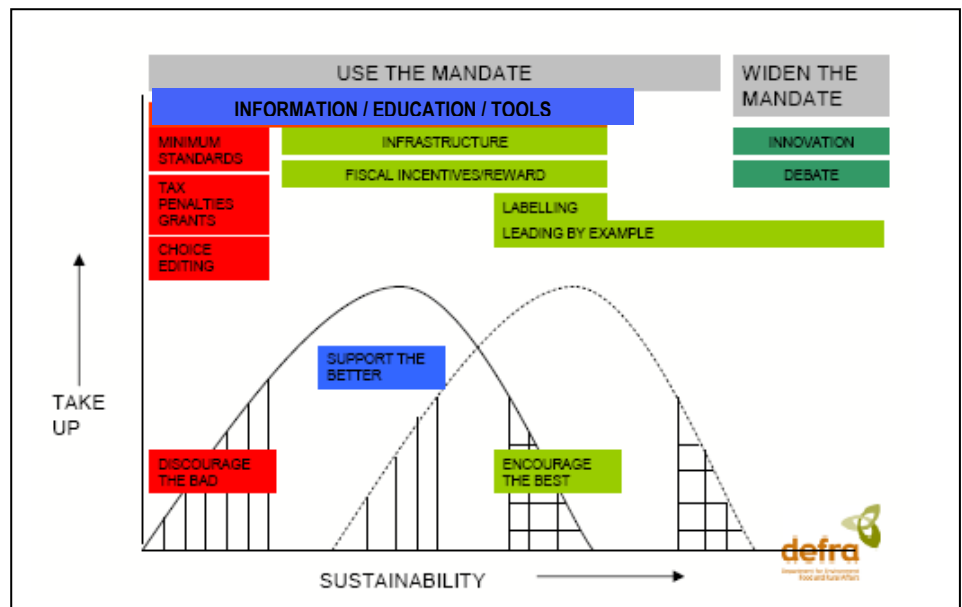
The above instruments are numerous and varied, however public education for sustainable consumption should be recognised as maintaining a unique and fundamental role in any SCP strategy due to its place as the primary tool for affecting the internal decision-making processes of an individual. Social Marketing Theory provides understanding of how public education strategies can lead to this direct affect on decision-making processes by applying commercial marketing principles for social benefits rather than for profit. The primary goal of an ESC programme is behavioural change, and this is in direct correspondence with the bottom line of social marketing. Five stages of change are identified in decision-makers as part of the process of social marketing:

- **Precontemplation** – the decision-maker is unaware of the subject and information;
- **Contemplation** – the decision-maker begins to consider the subject and information, but does not link this to action;
- **Decision/Determination** – a conscious choice is made to take action on the subject and incorporate the information into daily practices

- **Action** – the decision-maker tests/experience;s ways to incorporate new beliefs into practical behaviour;
- **Maintenance** – the decision-maker continues with regular practice of this new behaviour and may also incorporate into the practices of a wider community (Andreasen, 2002).

Furthermore, education strategies need to consider four main aspects in regards to consumer behaviours: how they are formed and established in the first place, how they may change (what are the factors that lead to a shift in values and behavioural practices), means to reinforce and maintain environmental values, and specific ways of controlling/ limiting

**FIGURE 4.2 – A ROADMAP FOR ENVIRONMENTAL BEHAVIOURS** (prepared by DEFRA-UK, Jan 2008: 20)



actions that have a negative environmental impact (DEFRA-UK, Jan 2008). Figure 4.2 depicts a roadmap for governments to utilise to encourage environmental behaviours that incorporates the above aspects of social marketing theory. As an initial step, it is beneficial for governments to regulate against bad behaviour, however this is not a means for achieving a long-term transition towards SCP. Education and Information provides the real turning point in consumer behaviour towards sustainable consumption. For new pro-environmental behaviours to be maintained though, consumers must have their sustainable consumption rewarded with a social infrastructure that supports and encourages these activities. (Turning Point provides a six phase process of social marketing, *see Appendix A* for full outline).

Social and Collaborative Learning strategies deserve particular attention in considering the importance of ESC. Based on practices of public participation and engagement, social learning is a powerful tool for extending beyond information provision and inspiring value transitions. Direct engagement in deliberation proceedings is a stimulus for critical praxis (*as discussed in 4.1*), thus this provides a powerful tool for the active analysis and challenging of existing value-belief systems. Recent research by Bull, Petts and Evans (2008) provides the first true evidence documenting a long-term, 'beyond process', learning occurring from public engagement. This research returned to three cases that occurred in the early 1990s in Hampshire, UK as part of a highly innovative public engagement process which established community advisory forums to discuss the County's waste management strategies. This study is unique in that it is the first to return to a case on public participation after such a long passage of time in order to examine the transformative learning that was a result of the process. The results of this work conclude, "In a significant number of cases the experience of the Hampshire process has shifted people's understanding of resource management

issues, directly affected their behaviour and in many cases, the behaviour of people they came into contact with” (Sep 2008: 713-4).

Another strong example comes from the Canadian government’s year-long round table process on sustainability and consensus. After conducting extensive public participation and deliberation, it was concluded that the major challenge for sustainability is not scientific/technical nor about resource management; rather,

[I]t is about dealing with people and their diverse cultures, interests, visions, priorities, and needs. Unfortunately, the approaches that have been used to manage differences—the courts, the ballot box, and reliance on expertise and authority—are proving insufficient to address the challenge of creating a sustainable society...It is through consensus that the ‘people’ differences can be addressed, understood, and resolved within the context of the best technical and scientific information. And it is through building consensus that we develop a collective commitment to manage scarce resources wisely (Cormick, et.al., 1996: 3).

In this light, what must be considered is an integration of the ideas of participation and citizenship, or participatory (environmental) citizenship. “Participatory Citizenship” links the idea of participation across political, social and community institutions. The call for participatory citizenship requires an evaluation and restructuring of institutions that mandate current power relations. “The question for participatory interventions becomes how they can enhance the ‘competency’ of participants to project their agency beyond specific interventions into broader arenas, thereby progressively altering the ‘immanent’ processes of inclusion and exclusion” (Mohan and Hickey, 2004: 66). Cornwall suggests that if participation is to move towards having transformative social effects then the real strategies of participatory citizenship should focus on “citizens’ political capabilities” and equip them with the knowledge, language and power to “shape their own conditions of engagement” (2004: 85).

Finally, we must also consider what are the main aspects of consumer activities which attention should be paid to in regards to sustainable consumption. One of the most primary of all consumption activities is food and sustenance, and its global production and consumption has a major environmental impact. Under global market systems, food’s production, packaging, delivery and wastage all carry heavy carbon footprints. Significant in-roads can be made by consumers to reduce this heavy environmental impact by consuming locally-grown, organic, unprocessed foods and minimising food wastage through composting. Household energy consumption through heating, cooling, lighting and appliances accounts for another major share of the carbon footprint produced by an individual consumer. Energy-efficient design, technologies, and appliances play a significant role in minimizing impact in this area, however the consumer still needs to purchase the energy-efficient appliance and also potentially choose to use it more sparingly. Consumption of transportation (consumer mobility needs) is a third area that leads to large carbon footprints in modern society. Technological improvements to green cars and the use of public transport may offset some carbon costs, however the most substantial reductions in this area will come from consumers choosing to directly limit their transportation activities that require fossil fuels and to complete more necessary activities in a single journey. Supporting consumers to make changes in these areas of food, housing and transportation require a careful formula of education, information provision, infrastructure adaptation and subtle regulation.

#### 4.4 Identifying Primary Mechanisms for Promoting Sustainable Consumption

Recognising the diverse factors that precondition consumption practices, it was necessary to conduct a whole systems analysis that considers personal and individual practice in conjunction with social and political systems. The broad understanding of education that is employed in this work considers formal, non-formal, and informal educational processes. As such, it considers direct information and knowledge that is provided to the individual, but it also addresses changes to the social and political systems that encourage sustainable consumption from a perspective of experiential education. The development of a social infrastructure that presents better and easier possibilities for sustainable consumption can achieve very important action learning outcomes.

The provision of consumer education for sustainable consumption that is being considered in this work attempts to address both how to affect the individual consumer at the level of his or her decision-making on consumption and also how to develop a supportive social infrastructure that not only fosters sustainable consumption but eventually makes this the norm. ESC should work to promote responsible behaviour and achieve the objective of developing environmental citizenship in respect to the practice of individual consumers. Regarding social and political systems, ESC should be linked directly with efforts to influence society's patterns of consumption and work to develop a supportive infrastructure for SCP. Finally, there is a need to consider the overall strategic procedure that connects these mechanisms and systems in order to catalyze the practice of sustainable consumption. This chapter identifies five primary mechanisms for promoting sustainable consumption:

##### Personal and Individual Practice:

- Promote Responsible Behaviour;
- Develop Environmental Citizenship;

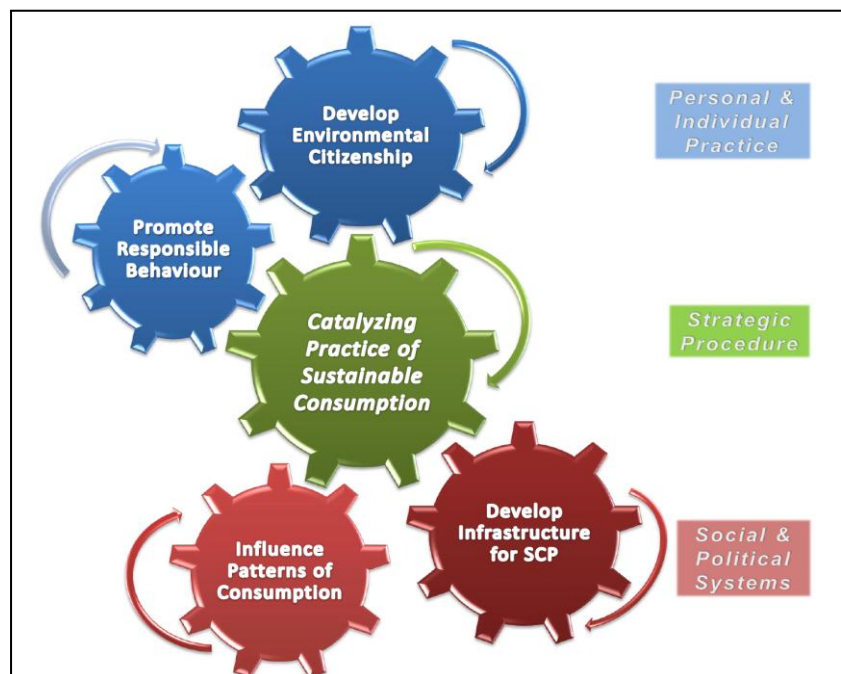
##### Social and Political Systems:

- Influence Patterns of Consumption;
- Develop Infrastructure for Sustainable Consumption and Production;

##### Strategic Procedure:

- Catalyzing Practice of Sustainable Consumption.

FIGURE 4.3 – PRIMARY MECHANISMS TO PROMOTE SUSTAINABLE CONSUMPTION



#### 4.5 Conclusions: Assessment Framework of ESC Mechanisms

The identification of the five primary mechanisms to promote sustainable consumption provides the basic outline of how ESC is understood and investigated in this chapter. The first mechanism addresses procedure. The second and third mechanisms share the target of personal and individual practice. While the fourth and fifth mechanisms share the target of social and political processes. Means to drive these mechanisms have been investigated across a wide range of theories and disciplines in this theoretical review. The ability to assess the primary mechanisms for promoting sustainable consumption has been functionalised by adding aggregate criteria from which the efforts of an ESC initiative on each mechanism can be evaluated (see Table 4.1 for assessment criteria).

The central mechanism is concerned with employing strategic procedure to provide an overarching schema that can integrate the other four mechanisms. “Catalyzing Practice of Sustainable Consumption” needs to be both holistic and systematic in its approach to promoting sustainable consumption. In the work *Securing the Future (2005)* outlining the U.K. government’s sustainable development strategy, such an approach for governments to affect consumer behaviour towards sustainable consumption is presented. This approach is based on a five point strategy: 1) *Enable*, action should be taken to remove barriers to sustainable consumption and to develop supportive infrastructure. Education and information provision about how to consume sustainably may also be considered a part of this enabling step. 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. This can be achieved through communication and campaigning on the issues at hand and also through the direct participation of the public in shaping policy. 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. These social/cultural shifts help engender a cultural paradigm grounded in sustainable practice (adapted from HM Government 2005, 24-41).

The mechanism to promote responsible behaviour must consider how ESC can directly affect the consumer’s decision-making process and engender a change in behaviour. Study of behavioural change and the factors that drive it are very difficult, however Social Marketing Theory does just this. By applying commercial marketing principles for social benefits rather than for profit, social marketing theory has developed an understanding of the stages of behavioural change a decision-maker experiences. During the initial stage – *precontemplation*, the decision-maker is unaware of subject and information. Education and awareness raising are necessary to initialise contemplation. In stage two – *contemplation*, the decision-maker begins to consider the subject, but does not link the subject at hand to his own action. At this point, clear linkages must be drawn between the issue at hand and the individual’s daily practices in order to advance to the next step. Stage three – *decision and determination* leads to a point where a conscious choice is made to take action. To advance this stage, practical examples to support action must be demonstrated. In stage four – *action*, the decision-maker tests and experiences ways to incorporate his new beliefs into practical behaviour. Efforts should be made at this point to support the new behaviour and reward the action taken. The final stage – *maintenance* sees the decision-maker continue with regular practice of this new behaviour. To aid in incorporating this new behaviour with practices of a wider community,



links should be drawn between the new behaviour and wider socio-cultural changes (adapted from Andreasen, 2002).

The other mechanism at the individual level is developing environmental citizenship. The concept of environmental citizenship is used as an idealistic objective to strive for. The idea of responsible (environmental) behaviour developed from early environmental education curriculums, but as the educational focus transitioned towards the concept of ESD the focus of promotion expanded to include a wider sense of citizenship. Environmental citizenship invokes a sense of rights and duties, much like that of national citizenship, but it also extends beyond social and national boundaries to encompass a global environmental perspective (UNEP-DTIE-IETC, 2003: 1). Furthermore, the concept also engenders ideas of participation in decision-making processes, an ideal of social justice, and the necessity of conscientious action on the individual's part to pursue sustainable development.

Environmental citizenship, as a formative process, aims not only to educate an individual but to structure their values and practices to support sustainable development. In order for environmental citizenship to lead to responsible behaviour, it is important that the individual is informed, empowered and able to participate in decision-making processes. From the literature on responsible environmental behaviour and environmental citizenship, it is possible to identify five values that are central to the ideal of an environmental citizen. First, *pro-environmental values* should promote and engender a personal belief that protecting the environment is important. Second, *individual empowerment* aims at securing individual participation in sustainable development through the understanding that each person can be a powerful agent of change. Third, *responsibility* encourages a sense of environmental citizenship and duty, and develops a personal understanding that each person is directly accountable for the course development takes. Fourth, the value of *simple actions* provides recognition that little steps can lead to big impacts and that individuals can affect change through conscientious decisions in their daily life practices. Finally, *future vision* aims to establish an inspired view of achieving a positive future and a sustainable society.






The initial mechanism of social and political systems, Influence Patterns of Consumption, considers the various ways in which governments can influence society and encourage sustainable consumption. A report by the German Technical Cooperation (GTZ) and partners (2006) details a set of five policy instruments to support sustainable consumption and production. First, governments often rely on *regulatory instruments*. These are successful in enforcing minimum standards and controlling against negative practices, however there is a clear difficulty in encouraging good practice through regulation. Second, another tool governments often use is *economic instruments*. These can include negative taxing, but are more successful in promoting good practice through such things as positive subsidies and green procurement strategies. Third, governments can use *educational instruments*. Though these are recognised as a standard part of the formal education sector, they are seldom applied outside of this sector as a tool of informal education. Educational instruments can focus on the production side through research, development and production training. They can also be applied to the consumption side through consumer education and the promotion of participatory learning/critical analysis techniques. The fourth instrument, *cooperative instruments*, are becoming more common and are used to create voluntary agreements (most often with industry) to improve production techniques and provide technology transfer. Finally, governments can use *informational instruments* to increase consumer awareness of sustainable

consumption options such as eco-labeling, auditing and reporting, consumer advice, and environmental quality targets (adapted from Tyson, ed. 2006).

The final mechanism, Develop Infrastructure for Sustainable Consumption and Production, aims at making it easy to practice sustainable consumption and holds the long term goal of sustainable consumption becoming the only real consumption option. To investigate this mechanism, it is first necessary to consider the various factors that precondition consumption practices. A UN-DESA (2009) report on ESC outlines six primary drivers of consumption and how they can be reformed to achieve sustainable consumption. It is recognised that to shift dramatically away from current consumption practices it is necessary to actively challenge these preconditioning factors that have in recent history normalised unsustainable patterns of consumption. The first driver, *economic development*, focuses on how we can improve productivity and reduce product cost. It must also consider opportunities for securing sustainable livelihoods and access to sustainable purchasing choices. The second driver, *technological advances*, promotes the supply of more efficient products and a move away from rapid resource consumption (potentially towards dematerialization). The third driver, *political settings and policy actions*, provides much of the supportive framework that guides the consumption and development behaviours that are practiced. There are numerous means for influencing both social and individual practices through policy, however there is also a challenge to create consistent goals and ideals. The fourth driver, *cultural and historical contexts*, deals with the underlying and deep-set codes of conduct that prevail in a given society and influence lifestyle practices. It is important to understand how people respond to these contexts and how they help to create meaning. The fifth driver, *social factors and conditioning*, must address the social meaning and symbolic value that is placed on consumption and material possessions. The final driver, *psychological motives*, focuses on personal understandings of happiness and quality of life with a special recognition of the current linkages to consumption (adapted from UN-DESA 2009).

The five identified mechanisms and their subcomponents provide a core understanding of what an effective ESC campaign will address. However, it must be recognised that this expands well beyond the traditional understanding of consumer education as mere information provision. This framework is being put forth both as a means of assessment on the effectiveness of a given ESC initiative and as an outline of what should be considered when preparing a new campaign on consumer ESC. A given ESC case could be analysed for its effectiveness based on an assessment of the level and depth to which it addresses each of these aggregate assessment criteria. Ensuring that an ESC campaign addresses the five mechanisms for promoting sustainable consumption and their aggregate subcomponents should secure a comprehensive and systematic structure to this campaign. In the final chapter of this report a strategy for planning ESC initiatives is put forward; a cross-comparison of this assessment framework of the primary ESC mechanisms and the strategy for implementation provides a robust understanding of the key priorities in affecting behavioural change towards sustainable consumption.

TABLE 4.1 – ASSESSMENT FRAMEWORK OF ESC MECHANISMS

	<p><b>Catalyzing Practice of Sustainable Consumption</b>  <i>Procedural Steps for systematic development towards sustainable consumption</i></p> <p><b>Enable</b> – remove barriers to sustainable consumption, develop supportive infrastructure, educate and give information about how to consume sustainably;  <b>Encourage</b> – reward good behaviour, penalise bad behaviour, and enforce minimum standards;  <b>Engage</b> – involve the public, communicate and campaign, utilise media resources, stimulate community action;  <b>Exemplify</b> – lead by example, develop good practice and achieve a policy consistency;  <b>Catalyse</b> – building from the other four points, make major shifts in social and cultural habits to engender a cultural paradigm grounded in sustainable practice.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Strategic Procedure</p>
	<p><b>Promote Responsible Behaviour</b>  <i>Stages of Change in a decision-maker's consumption practices</i></p> <p><b>Precontemplation</b> – the decision-maker is unaware of subject and information (<i>education and awareness raising is necessary to initialise contemplation</i>);  <b>Contemplation</b> – the decision-maker begins to consider the subject, but does not link to action (<i>clear linkages must be drawn between the issue at hand and the individual's daily practices</i>);  <b>Decision/ Determination</b> – conscious choice is made to take action and incorporate into daily practices (<i>practical examples to support action must be demonstrated</i>);  <b>Action</b> – the decision-maker tests/experiences ways to incorporate new beliefs into practical behaviour (<i>new behaviour and action must be supported and rewarded</i>);  <b>Maintenance</b> – the decision-maker continues with regular practice of this new behaviour and incorporates into practices of a wider community (<i>links should be drawn between new behaviour and wider socio-cultural changes</i>).</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Target: Personal and Individual Practice</p>
	<p><b>Develop Environmental Citizenship</b>  <i>Effective Value Promotion for consumers' proactive participation in sustainable consumption</i></p> <p><b>Pro-environmental values</b> – a personal belief that protecting the environment is important;  <b>Individual Empowerment</b> – that each person can be a powerful agent of change;  <b>Responsibility</b> – a sense of environmental citizenship and duty;  <b>Simple actions</b> – recognition that little steps can lead to big impacts;  <b>Future Vision</b> – an inspired view of achieving a sustainable society.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Target: Personal and Individual Practice</p>
	<p><b>Influence Patterns of Consumption</b>  <i>Efficient Tools and Instruments governments can utilise to encourage SCP</i></p> <p><b>Regulatory instruments</b> – used mainly to enforce minimum standards;  <b>Economic instruments</b> – negative taxing, positive subsidies and green procurement strategies;  <b>Educational instruments</b> – research/development, production training, public education, participatory learning methodologies, critical analysis techniques;  <b>Cooperative instruments</b> – improved production by technology transfer and voluntary agreements;  <b>Informational instruments</b> – consumer information: eco-labeling, auditing and reporting, environmental quality targets, consumer advice.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Target: Social and Political Systems</p>
	<p><b>Develop Supportive Infrastructure for SCP</b>  <i>Preconditioning Factors of Consumption to consider in developing a supportive infrastructure</i></p> <p><b>Economic development</b> – secure access to sustainable purchasing choices, reduce product costs, improve productivity and strengthen sustainable livelihood opportunities;  <b>Technological progress</b> – reduce resource consumption, promote product efficiency and dematerialisation;  <b>Political settings &amp; policy actions</b> – provide supportive political framework for transition to sustainable consumption and low-carbon lifestyles, also ensure policy consistency;  <b>Cultural &amp; historical contexts</b> – respond to deep-set codes of conduct that frame knowledge and behaviour;  <b>Social factors and conditioning</b> – address social meaning and symbolic value of material possession;  <b>Psychological motives</b> – address personal understandings of happiness and quality of life.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Target: Social and Political Systems</p>

- N.B.: 1. adapted from HM Government. 2005. *Securing the Future: Delivering UK sustainable development strategy*. DEFRA.  
2. adapted from Andreasen. 2002. "Marketing Social Marketing in Social Change Marketplace". *Journal of Public Policy and Marketing*; vol. 21 (1).  
3. values were identified as key concepts in the theories of responsible environmental behaviour and environmental citizenship  
4. adapted from Tyson, ed. 2006. *Policy Instruments for Resource Efficiency: Towards Sustainable Consumption and Production*. Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).  
5. adapted from UN-DESA. 2009. "Sustainable Lifestyles and Education for Sustainable Consumption".  
[http://esa.un.org/marrakechprocess/pdf/Issues\\_Sus\\_Lifestyles.pdf](http://esa.un.org/marrakechprocess/pdf/Issues_Sus_Lifestyles.pdf)



# SECTION II

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**CHAPTER FIVE**  
**INTERNATIONAL IMPLEMENTATION OF EDUCATION FOR SUSTAINABLE DEVELOPMENT**  
**ITS EVOLUTION IN POLICY AND IN PRACTICE**<sup>1</sup>

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### **5.1 The Key Elements of the Debate: Consumption and Citizenship**

**Education**, defined in the broadest sense here, refers to both the teaching and learning of knowledge and behaviours, social, moral and intellectual skills that contribute to the development and socialisation of human beings. UNESCO focuses on five types of fundamental learning: learning to know, learning to do, learning to be, learning to live together, and learning to transform oneself and society. Education does not only entail actions integrated to formal education but also refers to professional training and life-long learning as well as to information and sensitisation of citizens.

**Consumption**, which entails all actions that imply selecting, buying, using, caring and disposing of goods and services, is also considered as profoundly constitutive of contemporary lifestyles, representations, attitudes and behaviours. Mass consumption is now a key component of economic and social life as well as a core value in an increasing number of societies worldwide. Media and advertisements portraying materialistic lifestyles and promoting consumerism values have an influence on attitudes and consumption patterns globally. For example, American children spend between 4 and 5 hours watching television every day and, according to the Consumers Union (USA), they watch 30,000 advertising spots within a year. In this context, and given its social and environmental impacts today, consumption should be considered not only through its economic dimension but also through its ethical and political dimensions. Indeed, consumption can be seen as deeply connected to the core values of citizenship, which goes beyond nationality and refers to individual's rights and responsibilities within his/her community of life and values. Consumption is connected to both rights and responsibilities: it is about individual and collective security (consumers' protection), about providing means to enhance quality of life and sometimes express one's individuality, about being provided with clear and transparent information to make deliberate consumption choices. But just as citizens' responsibilities goes beyond voting, consumption is also something through which we can show responsibility towards and in solidarity with others and our communities, especially when the choices we make have an impact on their lives.

**Sustainable consumption** is based on this idea and aims at three complementary objectives: a rational utilisation of natural resources necessary to human life, an equitable economic and social development, a better quality of life for all. For the Consumer Citizenship Network, it implies the emergence of "consumer citizens", i.e. individuals making choices based on ethical, social, economic and ecological considerations. In UNESCO's definition, it integrates a range of social, economic and

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<sup>1</sup> This chapter is based on material originally prepared for the ESC workshop at the *International Conference on ESD* (October 2008, Paris) organised by UNEP ;

**Note : This article is written on titre personnel and does not necessarily reflect the opinion of UNEP or any other UN organisation.**

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political practices not only at the individual and household levels but also at the community, business and government levels. As highlighted in *Here and Now!* sustainable consumption consequently refers to a new social and cultural paradigm resulting from the,

necessity to rethink definitions of human needs and desires: principles of moderation and sufficiency become means of curbing social, economic and environmental imbalances and of stimulating responsible citizenship, while the oneness of humanity and the right of all to have their basic needs met remain fully recognised.<sup>4</sup>

Worldwide but especially in developing countries, individuals are increasingly facing the consequences of unsustainable patterns of consumption and production. Therefore, both developed and developing countries, whose natural and social environments are even more at stake, are concerned with sustainable consumption. In such a context of globalisation and interdependence, sustainable consumption becomes a major expression of global citizenship.

**Education for Sustainable Consumption (ESC)** aims at providing knowledge, values and skills to enable individuals and social groups to become actors of change towards more sustainable consumption behaviors. The objective is to ensure that the basic needs of the global community are met, quality of life for all is improved, inefficient use of resources and environmental degradation are avoided. 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 consumers for them to participate in the public debate and economy in an informed and ethical way.

Citizens need training in how to define issues; gather, handle and apply relevant information; consult; plan courses of action; make choices; analyze and assess the consequences of their actions, and reflect upon the effect they have made locally, nationally and in a global context. This is particularly true in their roles of consumers.<sup>5</sup>

Hence, ESC has become a core component of education for sustainable development and global citizenship. The Bonn Declaration on Education for Sustainable Development, adopted during the UNESCO World Conference on Education for Sustainable Development held in Bonn (Germany) on 31 March to 2 April 2009, recognises that "Unsustainable production and consumption patterns are creating ecological impacts that compromise the options of current and future generations and the sustainability of life on Earth as climate change is showing".<sup>6</sup>

ESC can be seen as an integrated approach partly based on the merging of sustainable development and consumer education. Consumer education policies at the national level generally aim at individual empowerment (consumer rights, household budgeting, and critical thinking skills) but can also be aimed at promoting public interest. However, the promotion of public interest through consumer education generally focuses on social and environmental rather than on political dimensions of consumerism. ESC, as a cross-cutting issue, could go further to combine all those aspects and become a new educational paradigm to raise education levels without creating an ever-growing demand for resources and consumer goods, to foster responsible individual and collective

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<sup>4</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p. 3

<sup>5</sup> Consumer Citizenship Network, *The Consumer Citizenship Network. Project Report Year 3 2005-2006*, Hedmark University College, 2006, p.6

<sup>6</sup> UNESCO World Conference on Education for Sustainable Development, 31 March – 2 April 2009, Bonn, Germany, Proceedings of the Conference, p.118



choices towards the environment and society. In this perspective, *Here and Now!* defines ESC as follows:

Education for sustainable consumption consists of the acquisition of knowledge, attitudes and skills necessary for functioning in today's society. It is responsibility learning which aims to contribute to the individual's ability to manage his own life while also participating in the stewardship of the global society's collective life.<sup>7</sup>

The objective is to empower people so that they are able to responsibly manage their social and environmental impacts, but also to participate in and stimulate the public debate about values, quality of life, responsibility and accountability. In this context, a growing number of countries have identified education, sustainable lifestyles and consumption as key priorities in the development of their national Sustainable Consumption and Production Action Plans (e.g. Argentina, Barbados, Cuba, Austria, Czech Republic, Denmark, France, Hungary, Poland, Sweden, UK, Mauritius, Korea, and Thailand).

#### ***Here and Now! Education for Sustainable Consumption – Recommendations and Guidelines***

*Here and Now!* has been jointly developed by UNEP and the International Task Force on ESC led by Italy in the framework of the Marrakech Process on Sustainable Consumption and Production (SCP), in cooperation with the UN Decade on Education for Sustainable Development and the Hedmark University College, in order to help fulfill the recommendations of the Johannesburg Plan of Implementation with regards to the elaboration of a 10-year Framework of Programmes for SCP (Marrakech Process). It has notably been drafted in consultation with the Consumer Citizenship Network (CCN), an interdisciplinary network of educators, researchers and civil society organisations representing 136 institutions in 37 countries created in 2003 to work on ESC and global solidarity<sup>8</sup>.

Aimed at policy makers, educational institutions and actors, *Here and Now!* mostly focuses on formal education. It contains two main chapters (*I-Addressing the challenges; II-Optimizing opportunities*) and one annex on relevant resources, with the objective of providing these actors with an instrument for policy-making and integration of ESC into education and sustainable development strategies. These guidelines also aimed at providing educators with pedagogical information/tools.

## **5.2 ESC within National Sustainable Development Strategies**

*How can ESC be efficiently integrated into educational institutions and curricula (schools and universities) as a cross-cutting issue?*

### Proposal

ESC needs to be given the coherence and consistency it currently lacks in national education policies at the primary, secondary and tertiary levels, which implies “including themes, topics, modules, courses and degrees about education for sustainable consumption in established curriculum” (*Here and Now!* recommendations). This can be achieved through obligatory courses with, for instance, a minimum of one hour a week each year and for all grades. Focusing on ESC integration into official programmes at the national level also impacts teacher training policies which will adapt accordingly.

<sup>7</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.3

<sup>8</sup> For further information see: <http://www.hihm.no/concit/>

### **5.2.1 Education for Sustainable Consumption: Rethinking formal education**

Despite increased awareness of the human impact on the environment and a greater focus on the consequences of individual lifestyle choices, sustainable consumption is still not always seen as a central topic in educational systems today and is not identified as a priority in national education policies. In fact, many aspects of sustainable consumption are already taught in schools, but ESC often remains sporadic or hardly visible due to a lack of cohesiveness and innovation. Yet, meeting the challenge of sustainable consumption will demand an appropriate reorientation of formal education, both in terms of institutions and curricula. Including ESC into national sustainable development strategies as well as in SCP Action Plans is an opportunity to do so at different levels: development of education policies from primary schools to high schools, adaptation of teacher training, promotion of sustainable education institutions, creation of pedagogical approaches and tools based on constant interaction between educators and other ESC actors, especially at the local level.

#### ***Developing education and research policies for sustainable consumption***

The recent OECD review of national consumer education policies demonstrates that central governments often play the leading role in promoting formal consumer education.<sup>9</sup> The OECD Committee on Consumer Policy produced recommendations on Consumer Education in 2009 that included education for sustainable consumption. At the regional and local levels, authorities also carry out these ESC policies in their areas and when consumer education is fully decentralised, cooperation with local consumer and citizen groups is reinforced. However, in most of the countries surveyed by the OECD, consumption is included as a non-compulsory topic in primary and secondary schools and is rarely addressed in higher education. As to education for sustainable development (ESD), it can be progressively integrated into education policies. In France for example, a first three-year plan for ESD was initiated in 2004 and a second one in 2007 in order to adapt primary and secondary schools curricula, institutions as well as teacher training at the national level. UNESCO has recommended turning ESD into a mandatory educational component: *“If sustainability is mandated, it is far easier to reorient the curriculum to address it than if incorporating ESD into the curriculum is optional.”*<sup>10</sup>

#### ***What about education for sustainable consumption?***

##### **(1) Adapting school programmes and curricula**

*A national initiative:* ESC first needs to be given the coherence and consistency it currently lacks in national education policies at the primary, secondary and tertiary levels. As stated in *Here and Now!* this implies *“including themes, topics, modules, courses and degrees about education for sustainable consumption in established curriculum”*.<sup>11</sup> The full integration and recognition of ESC into school programmes can be achieved through obligatory courses: according to *Here and Now!* guidelines, a minimum of one hour a week each year and for all grades (as either part of existing classes or as interdisciplinary themes and projects) should be required.

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<sup>9</sup> OECD, Directorate for Science, Technology and Industry, Committee on Consumer Policy, *Consumer Education*, draft report and background document for the OECD CCP Joint Conference on Consumer Education, October 2008

<sup>10</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005, p.37

<sup>11</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p. 7

Centralising ESC policy-making and implementation, at the national level, could be done through further development and reorientation of consumer education when this field has already been integrated into school programmes and curricula. In Norway, sustainable consumption has been well integrated in the new school curriculum<sup>12</sup> through collaboration between the Ministry of Education, the Ministry of Children and Consumer Affairs and the Ministry of Environment. Norway has given through this an example of how political will and collaboration between competent public authorities can create the context for ESC. Similarly in Mexico, consumer education is approached through its social and ethical goals defined as the recognition of the universal value of consumer rights and awareness of issues such as sustainable consumption, food and health or mass media. The Consumer Protection Federal Agency (Profeco) of Mexico, which is present nationwide, is mandated by the Federal Consumer Protection Law to prepare and carry out consumer education programmes in partnership with other governments agencies. As such, it has worked with the Ministry of Environment and Natural Resources to develop educational materials on sustainable consumption<sup>13</sup>.

*Inter-disciplinarity – a key dimension of ESC:* ESC deals with all aspects of everyday life and therefore needs to be addressed, through programmes and curricula, in a holistic and interdisciplinary way. This stands as strongly different from consumer education or environmental education, which are of course closely related to education for sustainable consumption but also often covered in specific disciplines: consumer education is usually treated under domestic sciences or home economics, environmental education is more easily integrated in natural sciences. When consumer education is traditionally focused on individual life management (purchasing, budget issues) and environmental education on nature preservation, sustainable consumption has to be approached as a crosscutting issue encapsulating lifestyles as a whole (attitudes, relation to nature and to the others, responsibility towards one's community, behaviours as an economic actor, etc.).

*Implementation options:* Taking into account this interdisciplinary dimension, *Here and Now!* suggests several ESC implementation options to be adopted by education policies: 1) *mainstreaming ESC as part of existing subjects/disciplines;* 2) *teaching ESC as a cross-cutting interdisciplinary theme and/or incorporated into projects and other activities as well as in schools clubs and after school activities;* 3) *integrating ESC as a specific subject.*<sup>14</sup> In any case, ESC addresses topics as diverse as life quality and lifestyles, resources, economics, consumption and the environment, consumer rights and responsibilities, media literacy, civic education, health and safety or global issues (environment, poverty, human rights, etc.).

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<sup>12</sup> OECD, Directorate for Science, Technology and Industry, Committee on Consumer Policy, *Consumer Education*, draft report and background document for the OECD CCP Joint Conference on Consumer Education, October 2008

<sup>13</sup> op.cit.

<sup>14</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.15

### **Highlights: ESC and media literacy**

In the framework of citizenship and media literacy, information management (digital and media, advertising and persuasion, labeling) is also among the important themes covered by sustainable consumption. With other key elements, media literacy stands as a crucial pillar of ESC, a necessary condition for informed and responsible behaviours. Education has a role to play in protecting individuals and giving them the means to keep making free and informed choices. In the framework of education for sustainable consumption, media literacy is therefore needed for people to be able to understand, analyse and evaluate the overwhelming amount of messages they receive everyday. Receiving or seeking information, being able to evaluate it, to question dissemination devices are all media literacy-related skills that provide individuals with the critical competencies necessary to exercise their freedom, the adoption of responsible behaviours and their participation in sustainable development: *"The present situation indicates the need for the further development of analytical, reflective thinking skills in order to decode the extensive and aggressive commercial messages to which individuals around the world are constantly exposed."*<sup>1</sup>

*ESC learning outcomes and skills:* ESC can be associated with common learning outcomes and targeted skills. The Earth Charter<sup>15</sup> provides a broad definition of ESC related competencies, highlighting their ethical and political dimensions such as the ability to adopt patterns of consumption which safeguard human rights, community well-being and the regenerative capacities of the earth. *Here and Now!* goes further into details when describing ESC related skills and distinguishes basic learning outcomes from generic learning outcomes. Basic learning outcomes cover critical awareness, ecological and social responsibility, action and involvement, global solidarity. In terms of knowledge, ESC basic learning outcomes refer to major topics such as understanding of economic and social systems in a globalised world as well as of what links consumption and territories at the local level, understanding of consumer and citizen rights, or ability to deal with media and information. On the other hand, generic competencies refer to moral and pragmatic qualities such as appreciation of nature and human diversity, concern for justice, peace and cooperation, ability to make critical and reflected decisions or to apply knowledge in practice, creativity and capacity to adapt oneself to new situations. Above the cross-cutting and interdisciplinary nature of ESC, those skills should also be reactive to social changes as well as relevant to various contexts, taking into account local and cultural diversity. In addition, these skills are associated with ESC in whatever context (formal, life-long education or awareness-raising) of implementation.

### **(2) Fostering research on ESC**

Comprehensive research is essential to strengthen the foundation for what is taught in ESC. It is meant to provide data on consumption patterns and their various impacts, as well as on how different cultures accept or reject changes. Research can examine a diversity of approaches to sustainable consumption based on different social, economic, geographic and cultural conditions. Didactic questions are also important: how can we teach sustainable consumption? How can we select topics and facts? What are the pedagogical approaches relevant to diverse cultural contexts?

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<sup>15</sup> The Earth Charter is a declaration of fundamental principles aiming at building a just, sustainable, and peaceful global society for the 21st century. It has been formally endorsed by more than 2,500 organizations in the world, including UNESCO. For more information, see: <http://www.earthcharter.org/>

At the international and European levels, the Consumer Citizenship Network<sup>16</sup>, the International Federation of Home Economics Teachers<sup>17</sup>, the Children's Identity and Citizenship in Europe Network<sup>18</sup> and SCORE (the Sustainable Consumption Research Exchange Network)<sup>19</sup> are the main groups involved in research focused on ESC. International organisations and programmes can also conduct specific international surveys on consumption patterns related to sustainability: for example, the OECD has recently conducted quantitative research on environmental household's consumption in 10 countries which results published in 2009.<sup>20</sup> UNEP DTIE, working with actors and networks already involved in research on ESC, has equally developed a qualitative Global Survey on Sustainable Lifestyles (GSSL) among young adults in 20 countries from all regions in order to identify cultural perceptions and understanding of sustainability, including from a consumption point of view. While across the globe, concerns for the future are high, preliminary results show the receptivity of young adults for innovative solutions for sustainable lifestyles and highlight the need for more education for them to connect their everyday life with social and environmental challenges. A GSSL report is expected in spring 2010 presenting conclusions and recommendations on sustainable lifestyles policies, along with national reports. For example, the Akatu Institute for Responsible Consumption in Brazil, that conducted the survey at a country scale, will publish a national report by the end of 2009. Initiatives have been taken at the national level as well. In the UK, the Department for Environment, Food and Rural Affairs (DEFRA) has established a programme of research on sustainable consumption (individuals and businesses).<sup>21</sup> Universities and researchers are involved in interdisciplinary projects focused on sustainable consumption, such as in RESOLVE (University of Surrey, UK), a project funded by the Economic and Social Research Council and aimed at understanding behaviours and practices of 'energy consumers'.<sup>22</sup> Numerous research centers and institutes are developing programmes including sustainable consumption and providing crucial information. For instance, the Sustainable Consumption Institute of the University of Manchester recently published a report addressing consumers' role in fighting against climate change.<sup>23</sup>

### ***Providing teachers with the right means through initial and continued training***

Developing teacher-training policies, programmes, tools and information systems on ESC is essential to integrating ESC into educational institutions and curricula as a cross-cutting issue.

As stated by UNESCO:

One of the great challenges of Education for Sustainable Development is to have student teachers understand the interrelatedness of the environment, society and economy and have this interrelatedness be evident in their teaching and their lives as community members... Addressing ESD will require student teachers to think about their profession from a different perspective and learn skills that perhaps, teachers in previous eras did not learn or use.<sup>24</sup>

<sup>16</sup> Consumer Citizenship Network: <http://www.hihm.no/concit/>

<sup>17</sup> International Federation of Home Economics: <http://www.ifhe.org/about.html>

<sup>18</sup> Children's Identity and Citizenship in Europe Network: <http://cice.londonmet.ac.uk/>

<sup>19</sup> SCORE: <http://www.score-network.org>

<sup>20</sup> This OECD (Environment Directorate) project aims at better understanding household environmental behaviour in order to improve policies in five key areas: residential energy use, water consumption, transport, organic food, and waste generation and recycling. For more information, see: [http://www.oecd.org/department/0,3355,en\\_2649\\_33713\\_1\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/department/0,3355,en_2649_33713_1_1_1_1_1,00.html)

<sup>21</sup> For more information see: <http://www.defra.gov.uk/environment/business/scp/research/index.htm>

<sup>22</sup> RESOLVE: <http://www.surrey.ac.uk/resolve/>

<sup>23</sup> "Consumers, business and climate change", University of Manchester Sustainable Consumption Institute, Munasinghe M., Dasgupta P., Southerton D., Bows A., McMeekin A., October 2009

<sup>24</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005p. 43

This is particularly true for ESC: one of the main conditions for educational curricula and pedagogical tools on ESC to be efficiently developed and implemented is for teachers and trainers to understand its relevance in education patterns as well as in their own disciplines. They first need to be told what is at stake and what is the difficulty – bringing sustainability into young people’s core values, translating abstract and complex issues into individuals’ daily life – but also to be given well adapted tools to develop lesson plans. Reorienting teacher education therefore stands as a strong recommendation in *Here and Now!* “Facilitate teaching and teacher-training which strengthens global, future-oriented, constructive perspectives within education for sustainable consumption”.<sup>25</sup>

A number of initiatives have been taken at the national level, illustrating that teacher training related to sustainability and more specifically to ESC seems to be more often provided and taken on a voluntary basis by teachers already involved in classroom activities, through long term training systems or events. In Portugal for instance, the Consumer Directorate-General, in co-operation with the Ministry of Education and consumer organisations, provides internal and external training programmes for teachers involved in specific areas related to consumer education, including sustainable consumption. This initiative has led to the development of a *Guide to Consumer Education* to help teachers implement consumer-related topics in school curriculum from a citizenship and sustainability perspective.<sup>26</sup> Local actors can also participate in teacher training on ESC: in France, the Center of Pedagogical Documentation and the Environment Agency of Val-de-Marne have organised workshops on education for sustainable development in 2007 to provide voluntary teachers and education actors with resources and concrete projects on responsible behaviours. Of course, universities and institutions responsible for delivering professional education programmes are directly concerned. The Rhodes University Environmental Education and Sustainability Unit has set up a teacher professional development course “Schools and Sustainability” aimed at strengthening participation of local teachers and pupils in curriculum-centred environmental learning and change processes. This course also encourages teachers to reflect on their changing practice over a period of time, while trying out new ideas.<sup>27</sup>

At the international level, important reports and tools on teacher education and training have been developed. They provide guidelines for integrating ESC into both teachers’ initial and continuing training. The Consumer Citizenship Network has developed some *Guidelines for Consumer Citizenship Education (vol.1)* available online, prepared for teachers in higher education in general and teacher trainers in particular.<sup>28</sup> The UNESCO *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability* is also an important source of inspiration for making ESC an integral part of teacher training. Along with the existing national and local initiatives, they show how interdisciplinary coursework on sustainable consumption and materials can be provided to help current and future teachers understand better their mandated curriculum and identify topics or themes related to sustainable consumption. They mainly recommend building courses with local actors such as NGOs, institutions, clubs, religious organisations as well as with government agencies,

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<sup>25</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.7

<sup>26</sup> OECD, Directorate for Science, Technology and Industry, Committee on Consumer Policy, *Consumer Education*, draft report and background document for the OECD CCP Joint Conference on Consumer Education, October 2008

<sup>27</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005, p. 46

<sup>28</sup> See: [http://www.hihm.no/eway/custom/ccn\\_otr/introduction.htm](http://www.hihm.no/eway/custom/ccn_otr/introduction.htm)

businesses, etc. to teach about local sustainable consumption issues and solutions. This allows participants to translate directly sustainability into their local reality, to build and strengthen local or regional networks by sharing ideas, experiences and materials. Partnerships between teacher-education institutions and elementary and secondary schools, and other educational organisations (e.g. museums, outdoor education sites and nature centers) can also be efficient tools to integrate ESC into teacher training, initially and in the long run.

### ***Building supportive educational institutions***

ESC policies without relevant infrastructures and means at the institutional level are unlikely to be implemented efficiently. This is why integrating ESC into campus management is one of the objectives of *School Agenda 21* in the framework of the *Local Agenda 21* process. Teachers and students need their educational institutions to adapt their own management systems to recognise sustainable consumption as a legitimate issue and to understand the actions it refers to.

For educational institutions, adapting management systems takes effect through sustainable procurement, equipment, building management, public administration and services, or participation of staff and students in school events on sustainable consumption. Important and successful initiatives aiming at integrating ESC into educational institutions have been successfully developed at the international, national and local level, such as:

- *International projects and competitions:* The Eco-Schools international award programme, initiated by the Government in England in 2006 (Department for Children, Schools and Families), aims at mainstreaming sustainability issues and practices into everyday school life. The programme provides guidelines for school to address a variety of environmental themes, ranging from litter and waste to healthy living and biodiversity. Forty countries are currently involved in Eco-Schools (more than 40,000 schools) from the UK to South Africa.<sup>29</sup>
- *Regional partnerships:* In Africa, MESA (Mainstreaming Environment and Sustainability into African Universities), led by UNEP and its partners, is supporting a partnership programme to mainstream environment and sustainability concerns in African universities. It addresses community engagement and campus management but also teaching and research.<sup>30</sup>

The non-governmental sector can also be involved, as shown by the Ideas Bank in Norway, a private foundation that is coordinating an educational project for sustainable consumption, in cooperation with Eco-net of Denmark and Ekocentrum of Sweden (15 high schools have signed up the project so far).<sup>31</sup>

- *Pilot projects:* At the national level, pilot projects offer a good opportunity to illustrate how sustainable campuses can be managed. The Taiwan Sustainable Campus Programme (TSCP), launched in 2002, provides funds for renovation and has created a platform for first-hand teaching and learning experiences at the National Taiwan Normal University (NTNU). An old administration building of the College of Sciences and the surrounding school garden have been

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<sup>29</sup> For more information, see: <http://www.eco-schools.org.uk/>

<sup>30</sup> For more information see: <http://www.unep.org/Training/features/mesa.asp>

<sup>31</sup> OECD, Directorate for Science, Technology and Industry, Committee on Consumer Policy, *Consumer Education*, draft report and background document for the OECD CCP Joint Conference on Consumer Education, October 2008

converted into a Sustainable Campus, which has been visited by about 1400 students and teachers since April 2005.<sup>32</sup>

- *Reorientation of regulatory frameworks:* In France, public procurement standards integrate sustainability since 2006 through the new code for public markets that reinforces the possibility for public buyers to favour sustainability criteria.<sup>33</sup>

Ensuring that educational institutions reflect the priority given to sustainable consumption in their daily management is one of the important recommendations of *Here and Now!*, which echoes with the UNESCO guidelines on reorienting teacher education.

### ***Developing appropriate pedagogical approaches and tools***

ESC relies on the ongoing and coherent development of pedagogical approaches and tools. But ESC faces several challenges, tackled by those who develop and disseminate resources and tools. *Here and Now!* identifies three main obstacles to ESC: at the conceptual, didactic and socio-cultural levels. The concept of sustainable consumption itself is perceived as difficult to translate into people's daily reality; didactic resources available are fragmented, sometimes based on outdated scientific data or models not adapted to real life and students' experience; and students tend to express disillusionment, passivity and a sense of powerlessness that makes it difficult to create the motivation for them to be actors of change. However, they are looking for better quality of life and willing to make meaningful choices in their life, which makes sustainable lifestyles a potentially very inspiring objective for them.

#### **(1) Pedagogical guidelines for ESC**

Numerous resources have been developed at the international, regional and national levels – all tools for setting up projects and lesson plans on ESC at school and outside the classroom. They could be adapted to different contexts and disseminated through educational networks and platforms.

- *At the international level:* *Here and Now!* provides a number of methodological recommendations for sustainable consumption teaching and learning. The Resources annex of *Here and Now!* contains a significant list of existing tools developed in the field of ESC. *Teaching and Learning for a Sustainable Future*, a multimedia teacher education programme (25 modules) published by UNESCO, addresses sustainable consumption as a cross-curricula issue.<sup>34</sup> The *Education for Sustainable Development Toolkit*, also published by UNESCO, contains general guidance and tested exercises that can be used in ESC as well.<sup>35</sup> The UNEP/UNESCO YouthXchange programme has produced a toolkit with a guidebook for teachers, educators and youth to help raise awareness on sustainable consumption. This guide has been translated in over twenty languages and has been adapted to national and local contexts by YXC partner countries.<sup>36</sup> UNEP/UNESCO YouthXchange is a contribution of the two agencies to the United

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<sup>32</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005, p.44

<sup>33</sup> Décret n°2006-975 du 1er août 2006. See: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000264576&dateTexte=>

<sup>34</sup> To access the online version: <http://www.unesco.org/education/tlsf/>

<sup>35</sup> UNESCO, *Education for Sustainable Development Toolkit*, Education for Sustainable Development in Action. Learning and Training Tools N°1, Education Sector, October 2006

<sup>36</sup> For more information on YouthXchange: <http://www.youthxchange.net/fr/main/home.asp>



Nations Decade of Education for Sustainable Development and is their flagship project on educating for sustainable consumption.

- *At the European level:* ChangeLab is a European initiative (UK and other EC countries) through which a research on pedagogical approaches to SCP has been done.<sup>37</sup> The European Diary initiative offers an interdisciplinary and thematic approach to numerous topics including ESC. This Diary describes the social, economic and environmental consequences of young people's actions. The annual diaries and their accompanying teacher guidelines have been adapted, translated and used in nineteen European countries since 2004.<sup>38</sup>
- *At the national level:* examples of educational institutions and actors developing tools and channels of communication for setting up teaching plans on ESC can be found. In Portugal, a "Guide on Consumer Education" has been developed to help teachers in their activities on consumption from a citizenship and sustainable development perspective. In France, two document centers provide teaching resources on consumer education (Pedagoteca of the National Consumer Institute and the National Centre for Pedagogical Documentation) and the EduSCOL pedagogical website, developed by the Ministry of National Education, provides resources and examples on how to integrate sustainable development issues into school curricula.<sup>39</sup>

An increasing number of countries have taken the initiative to translate, adapt and implement the UNEP/UNESCO YouthXchange Training Kit on Sustainable Consumption at the national level: the guide is currently being translated and adapted by Germany (with a focus on German-speaking countries – Germany, Belgium, Luxembourg and Switzerland), Croatia, Ecuador, Egypt, Jordan, Syria, Lebanon, Tunisia, Morocco, Turkey, India the Philippines, Israel and possibly Brazil and Russia in 2010. Finalised translations include France, Spain (including Catalan), Italy, Norway, Portugal, Belgium, Slovenia, Hungary, Greece, Peru, Argentina, Colombia, Mexico, China, Japan, Korea, Sri Lanka, and the United Arab Emirates.

## **(2) Cooperation between teachers and pedagogical staff**

Establishing a common understanding of ESC among teaching and pedagogical staff facilitates interdisciplinary cooperation and makes mainstreaming ESC in established subjects easier. Hence, comparative and interdisciplinary approaches should be encouraged to go beyond traditional frontiers between hard sciences and social sciences and towards the development of more efficient pedagogical methodologies and tools. Cooperation between teachers and pedagogical staff on ESC also contributes to reinforce the school's commitment towards sustainable consumption. Enhancing cooperation between professionals from diverse disciplines in order to develop integrated approaches to education for sustainable consumption counts among the strong recommendations of *Here and Now!* in terms of ESC implementation.<sup>40</sup>

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<sup>37</sup> See: <http://www.changelabproject.org>

<sup>38</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.15

<sup>39</sup> See EduSCOL website: <http://eduscol.education.fr/D0185/accueil.htm>

<sup>40</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.7

### (3) Methodological approaches

Given the holistic and inter-disciplinary nature of ESC, various methodological approaches are promoted:

- Those methods are mainly based on *participation and reality-based exercises*. They include dialogue and discussions, seminars, tutorials and future workshops, case studies and field trips to bring experiences into the classroom, project planning, role-playing, drama and games, etc. Hence, students' active learning is at the core of ESC pedagogical approaches. Specific school projects can be developed in this perspective, such as in India through the Gobar Times Green Schools Programme (GTGSP), which involves the survey of schools' environmental practices by their own students.<sup>41</sup>
- The *use of media, information and communication technology*, the Internet and online resources, is also an important component of ESC implementation. This is particularly true with regards to media literacy. In this field, specific networks and tools are being developed in which ESC could easily be integrated such as: The Media awareness Network, which is one of the world's most comprehensive collections of media education and Internet literacy resources. Developed by a Canadian non-profit organisation since 1996, it promotes media and Internet education by producing online programmes and resources, series of lessons related to media literacy and consumerism;<sup>42</sup> MediaSmart, a media literacy programme aimed at children and implemented in Canada, Sweden and the United Kingdom among other countries;<sup>43</sup> The European Charter for Media Literacy, which aims at fostering greater clarity and wider consensus in Europe on media literacy and media education through the development of a voluntary network of media educators in Europe.<sup>44</sup>
- *Fostering cooperation between education institutions and local stakeholders* is an important component of ESC pedagogy and implementation. The overall objective is to structure education around young people's everyday lives and interests. Therefore, local environments and cultures need to be taken into account when the objective is to integrate the culture of sustainable consumption into people's habits and attitudes. In addition, teaching and learning tools for ESC benefit from a better understanding of local territories as countries have greater geographic, cultural and economic diversity that a singular national curriculum cannot address properly. For example, researchers at the University of Bath (UK), who led the project on "Listening to Children – Environmental Perspective and the Schools Curriculum", in partnership with teachers, eleven to twelve year old students and community representatives, have demonstrated that young people are more attracted to curricula addressing directly their community issues.<sup>45</sup> In this framework, non-formal education tools or activities complement more traditional approaches, such as theme days, school competitions and contests, after school activities, discussions for parents, etc.

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<sup>41</sup> Op.cit., p.14

<sup>42</sup> For more information, see: <http://www.media-awareness.ca/>

<sup>43</sup> See: [www.mediasmart.org.uk](http://www.mediasmart.org.uk)

<sup>44</sup> See: <http://www.euromedialiteracy.eu/>

<sup>45</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005, p.40

- A local and multi-stakeholder approach also allows developing a sense of citizenship among students towards their environment. This can lead to *the linking of ESC and community service*, offering opportunities for the practical application of theoretical study. For example, a manual on how to conceptualise, structure and facilitate the participation of young people in the community development process, *Creating Better Cities with Children and Youth*, has been field-tested through the work of UNESCO's Growing Up in Cities project.<sup>46</sup> In Portugal, the school project "Fair Trade Clubs" contributes to educate school children on sustainable development.<sup>47</sup> In the city of Macaè (Rio de Janeiro, Brazil), the Eco-citizen Programme, which was developed to face the problems caused by oil production and chaotic urban growth (garbage, tree felling, pollution, settlement patterns, lack of water, etc.) has contributed to the improvement of the local environment's sanitation and wastes.<sup>48</sup>

### 5.3 Education for Sustainable Consumption within Professional Training

*How can we encourage the development of ESC within professional training (trade, marketing, communications, advertising, etc.)? What are the roles of universities, public actors involved in career services, NGOs, consumers associations and businesses in this process?*

#### Proposal

At the university level, interdisciplinary courses on sustainable consumption should be developed and this topic should become compulsory in specific disciplines and curricula closely interlinked with consumption issues such as marketing, advertising and communications in general. In terms of continuing training, public actors involved in career services should be able to recommend trade, marketing and advertising professionals with specific training programmes on sustainable consumption. More professional degrees on sustainable consumption should be developed at the international, European and national levels.

ESC is a life-long process and is not restricted to formal or non-formal education aimed at children and young people. In many cases, sustainable consumption could be considered a key topic in professional trainings, starting with university programmes.

Sustainable consumption patterns are about to become core components of contemporary life from an economic, social and environmental point of view. In this context, young adults, whatever their training and career plans are, should be trained on sustainable consumption both as citizens and as professionals. Hence, universities are a driving force of change towards sustainability: while training young adults to enter the labour market, one of their main objectives is to offer high quality teaching in line with trends that orient the future towards sustainable development. Additionally, universities are frequently involved in continuing education, another important field of ESC implementation through which professional practices can be reoriented.

Sustainable development is progressively becoming an important issue for universities worldwide. The International Association of Universities (IAU) pays great attention to sustainable development

<sup>46</sup> For more information, see: <http://www.unesco.org/most/guic/guiccbccy.htm>

<sup>47</sup> OECD, Directorate for Science, Technology and Industry, Committee on Consumer Policy, *Consumer Education*, draft report and background document for the OECD CCP Joint Conference on Consumer Education, October 2008

<sup>48</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.20

challenges both in terms of programmes development, students life and campus management. For example, the association of University Leaders for a Sustainable Future supported sustainability as a critical focus of teaching, research, operations and outreach at colleges and universities worldwide. It also served as the Secretariat for signatories of the Talloires Declaration, a ten-point action plan committing institutions to sustainability and environmental literacy in teaching and practice that was signed by over 350 university presidents and chancellors in more than forty countries.<sup>49</sup> At many levels (national, regional, inter-regional), partnerships between several universities can also be built to encourage the greening of campuses and curricula: hence, the ACES network (acronym for Curriculum Greening of Higher Education) has been coordinated by the University of Girona in Spain since 2000 with five European and six Latin-American universities.<sup>50</sup>

- However, ESC is still rarely represented in university programmes. It can still be taught as a specific topic in the framework of highly specialised degrees, in marketing for example or in international politics and economics: at Mahidol University in Bangkok (Thailand), courses about Consumer Rights and Human Rights have been held as part of the International Studies programme.<sup>51</sup>
- Beyond these sporadic cases, a real integration of ESC in higher education can be achieved through policies at the government or at the university level, fostering the development of interdisciplinary courses on sustainable consumption, likely to be used to fulfil degree requirements across disciplinary departments.
- Degrees on sustainable consumption could also be put in place: for example, a call for proposals was launched by the European Commission in February 2007 to develop a European master's course in consumer affairs. One of the successful proposals was submitted by the Technical University of Munich in Germany (European Master Programme on Consumers Affairs) and clearly include sustainable consumption among the key areas it covers.<sup>52</sup> At the regional as well as at the national level, it would be crucial to integrate the principles and objectives of ESC in such initiatives.
- Sustainable consumption issues and challenges are also particularly legitimate and relevant in the framework of professional trainings in fields such as marketing, communications and advertising. Students in the advertising and marketing sectors have to be prepared for the growing challenge of consumers no longer satisfied with opportunistic claims and green washing. In this context, a growing number of educators and professionals in these fields are conscious of the rising importance of sustainability but effective tools are needed to help them respond to sustainable consumption issues and demand. In this context, UNEP DTIE has produced a CD-ROM - *Sustainability Communications - A Toolkit for Marketing and Advertising Courses*, in partnership with the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the United Nations Decade of Education for Sustainable Development and the International Association of Universities, and supported by the International Task Force on

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<sup>49</sup> For more information see: [www.ulsf.org](http://www.ulsf.org)

<sup>50</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005, p.25

<sup>51</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.18

<sup>52</sup> For more information on the selected proposal, see: [http://ec.europa.eu/consumers/empowerment/cons\\_education\\_en.htm#master](http://ec.europa.eu/consumers/empowerment/cons_education_en.htm#master)

Sustainable Lifestyles led by Sweden in the framework of the Marrakech Process on Sustainable Consumption and Production (SCP). This CD-ROM is aimed at higher education professors training tomorrow's marketing, advertising and communication managers as well as students interested in these issues. It provides a synthesis of theoretical and methodological knowledge as well as pedagogical resources (e.g. case studies, exercises, resource documents). It can also be useful for professional associations, marketing, advertising and communication experts, as well as for educators.<sup>53</sup>

- ESC can be integrated into many other specific fields of study such as tourism. At the international level, *"Sowing the Seeds of Change: an Environmental and Sustainable Tourism Teaching Pack for the Hospitality Industry"* (SSC), developed by UNEP and the International Task Force on Sustainable Tourism Development led by France within the Marrakech Process on SCP, introduces environmental and sustainable tourism issues into the hospitality curricula.<sup>54</sup>

In any case, developing ESC within degrees, programmes and courses could be done in partnership with public actors involved in career services, NGOs, consumers associations, companies and business associations (such as Chambers of Commerce). Their role in implementing ESC still needs to be further defined and illustrated through specific projects.

#### **5.4 Education for Sustainable Consumption through Awareness-Raising**

*Is it the role of public communication and awareness raising campaigns to integrate the principles and objectives of media literacy? How can businesses participate in raising public awareness with regards to sustainable consumption?*

##### Proposal

Public campaigns on sustainable consumption behaviours are useful in the long run but they should be associated with actions aimed at providing citizens the means to deal with advertising messages, which can be initiated by public actors and civil society. Businesses could contribute also through responsible communication.

For society to evolve towards sustainable consumption and production patterns, communication and public information as well as awareness-raising initiatives are necessary. Those actions, campaigns and initiatives participate in building new values and in motivating the adoption of new behaviours. Along with formal, non-formal education and professional training, communication and awareness-raising are crucial components of ESC in a perspective of life-long learning. Informing, sensitising, influencing citizen's perceptions and behaviours, supporting public policies are all objectives encapsulated in ESC understood here as awareness-raising. Communication campaigns on sustainable consumption, at the international, national and local levels, led by public institutions as well as by NGOs and businesses, have been multiplying to inform, sensitise, influence citizens' perceptions and behaviours and support public policies.

<sup>53</sup> The CD-Rom is available online: <http://www.unep.fr/shared/publications/cdrom/DTIx0886xPA/>

<sup>54</sup> More information on UNEP DTIE website at <http://www.unep.fr/scp/education/materials.htm>

- At the level of *intergovernmental organisations*, UNEP's Division for Technology, Industry and Economics has been developing communication campaigns and tools on sustainable consumption for several years: a Resource Kit on Sustainable Consumption & Production, composed of twelve fact sheets (advertising, eco-design, energies, food, housing, leisure, lifestyles, mobility, New Information and Communication Technologies, textiles, tourism and water), which aim at providing background information on selected themes by analyzing the environmental and/or social impacts of related activities and featuring examples of good practices around the world; more recently, the TV-spot 'Eco-tips for jeans' that explains in a humorous way how to fight against climate change by adopting good practices during the use phase of a pair of jeans.<sup>55</sup> Through its cooperation with the Marrakech Task Force on Sustainable Tourism Development, UNEP launched the Green Passport Campaign aimed at raising tourists' awareness of their potential to contribute to sustainable development by making responsible holiday choices.
  
- *Public institutions*, at the level of ministries, specialised agencies or local authorities also have an important role to play in raising awareness on sustainable consumption among citizens. They also involve various stakeholders from civil society and the private sector in their campaigns. In France, the national environmental agency ADEME (Agence de l'Environnement et de la Maîtrise de l'Energie) has run several national campaigns (recently on energy savings and on waste management) and provides online information on eco-consumption.<sup>56</sup> Also in France, the Ministry of Ecology and Sustainable Development promotes the «Eco-gestes» (Environmental Actions) on its general public web page.<sup>57</sup> In Spain, the Ministry of the Environment organises «Hogares verdes» (Green Households) programme. In Sweden, "Think twice! – an action plan for sustainable household consumption" is a four-year programme developed by the Swedish Ministry of Agriculture, Food and Consumer Affairs to sensitise individual households to sustainable consumption. The communications and education campaign addresses Swedish citizens on their food, housing and transportation habits.<sup>58</sup> In Italy, at the local level, the "Town with another Economy" (Città dell'altra economia) in Rome stands for a significant example of an initiative taken by local authorities in partnership with other local stakeholders. Since 2006, a part of the city is dedicated to the development and promotion of "Another Economy" with exhibitions and various events.<sup>59</sup> In Venice, the initiative "Cambieresti?", led by the City of Venice and developed with numerous partners, aimed at involving citizens in a wide 'social game' to reduce and reorient consumption through communicative strategies and information.
  
- Among the main communicators on sustainable consumption, *NGOs* are particularly active. ChangeLab website (mentioned above) provides, through a large project database, a lot of examples and case studies on sustainable consumption. As an example, ECODES<sup>60</sup> in Spain, an NGO dedicated to sustainable development and working on ESC, has organised a video contest on sustainable consumption. With the support of the Spanish Ministry of the Environment, this NGO is also currently setting up an internet-based "Climate Ranking" campaign, launched in

<sup>55</sup> To access UNEP communication tools and campaigns, visit: <http://www.unep.fr/scp/communications/>

<sup>56</sup> See: <http://www.faisonsvite.fr/> and <http://www.reduisonsnosdechets.fr/>

<sup>57</sup> See: <http://www.ecologie.gouv.fr/-Eco-citoyens-.html>

<sup>58</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008

<sup>59</sup> See: <http://www.cittadellaltraeconomia.org/home/>

<sup>60</sup> ECODES: <http://www.ecodes.org/>

November 2008, with the objective of providing consumers with information on specific products' impact on climate change (computers, mobile phones, textile, etc.). Equiterre, a Canadian-based NGO, has developed a "Guide des Consom'acteurs" (Guide for consum'actors) in French and is running a campaign "Change the World, step by step", to communicate on twelve simple individual actions to be taken everyday as a responsible consumer.<sup>61</sup>

- *Business and advertisers* have a special role to play that requires further research. Numerous companies, especially in developed countries, have created communication and advertising campaigns on issues related to sustainable consumption. The social pressure put on business with regards to its role in the promotion of unsustainable consumerism values and habits is an important factor in this phenomenon. Those campaigns are diverse and often quite controversial, ranging from green marketing campaigns (promoting environmentally and socially responsible products, information on green labels) to sensitisation targeting the general public.

In addition, informing consumers on responsible and sustainable consumption choices has become a common practice for the emergence of a social entrepreneurship market. For example, in Canada, the social enterprise "Ethiquette.ca – the Responsible Consumer Network" offers Quebec consumers online information on consumption choices (products and services) that reduce harm to the environment and improve social conditions.<sup>62</sup>

The role of advertising in ESC is a subject of discussion, especially with regards to young people and children. Besides advertising campaigns explicitly promoting sustainable consumption, the regulation of the advertising sector has a specific status with regards ESC, in the sense that norms and limits also stand for strong societal and cultural signals in terms of what our society can accept when it comes to consumption patterns (e.g. in France, alcohol ads cannot represent human beings and tobacco ads are forbidden). One third of the European Union countries have already enacted specific rules on children and advertising in the framework of the Television without Frontiers Directive (Audiovisual Media Services Directive since 2007). Sweden remains a special case as it has enacted particularly restrictive rules to limit advertising aimed at children on TV: since 1991, advertising is forbidden during children TV shows. In Luxembourg and in Belgium, advertising is also forbidden prior to and after children TV shows.<sup>63</sup> Self-regulation tools can also be developed, such as in France where a "Charter for Eco-responsible advertising" was signed between the government and the president of the BVP (Bureau de Vérification de la Publicité).<sup>64</sup>

A great number of campaigns on sustainable development and from all sectors are presented and described in the Creative Gallery on Sustainability Communications developed by UNEP. This Gallery is a database that compiles communication and advertising campaigns from all around the world produced by companies, NGOs, governments, local authorities and all stakeholders concerned by the promotion of sustainable development in general as well as by the development of green

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<sup>61</sup> Equiterre: <http://www.equiterre.org/>

<sup>62</sup> See: <http://www.ethiquette.ca>

<sup>63</sup> The Courier UNESCO, September 2001: [http://www.unesco.org/courier/2001\\_09/uk/medias.htm](http://www.unesco.org/courier/2001_09/uk/medias.htm)

<sup>64</sup> To see the BVP recommendations: <http://www.bvp.org/fre/informations-generalistes/recommandations-deontologiques/integral-des-recommandations/>

products and services.<sup>65</sup> The Council of Europe, in the framework of its actions on social policy also offers a review of initiatives on responsible consumption country by country in Europe.<sup>66</sup>

However, the gap between people's recognition of and commitment to sustainability issues and their actual consumption habits remains a real challenge in terms of communication, primarily for public institutions but also for non-governmental actors involved in the sensitisation of citizens. Guidelines and tools have been developed to help communicators organise campaigns on sustainable development, including sustainable consumption, adapted to their targets and objectives.

- With Futerra, a UK-based communications agency, UNEP has produced *Communicating Sustainability: How to produce effective public campaigns*, which offers guidelines to policy-makers and communicators within public institutions to develop communication campaigns on sustainable development. The guide is intended to work as a toolkit, providing tips, ideas and best practice case studies for inspiration. Its success (more than 500,000 downloads on UNEP website only) demonstrates the intensity of the demand on behalf of public institutions.<sup>67</sup>
- The *Framework for a DESD Communication Strategy* in support of the UN Decade of Education for Sustainable Development (2007) can also be an inspiring tool for communication on sustainable consumption to different target groups (policy makers, community leaders, trainers, educators, youth, households and families, etc.). It also identifies seven action areas: knowledge-building and knowledge sharing, advocacy and lobbying activities, capacity-building and training, support and advocacy for ESD, identifying key issues, platforms for dialogue, assessment of effectiveness and monitoring progress.<sup>68</sup>
- Regarding business and awareness-raising, UNEP has produced a specific publication: *Talk the Walk - Advancing Sustainable Lifestyles through Marketing & Communications* which proposes key tips to develop appropriate marketing strategies and communicate effectively on sustainable goods and services. It notably targets marketing and communication departments of companies, advertising agencies and all communication experts.<sup>69</sup>

## 5.5 Multi-Stakeholder Cooperation for Education for Sustainable Consumption

*How can we mobilise all actors and bring them to cooperate for the development of methodologies and tools that are adapted to local realities and cultural contexts?*

### Proposal

Strengthen connections between researchers, lecturers, teacher trainers and socio-economic actors and stakeholders, which can also involve intergenerational learning as an integrated aspect of education for sustainable consumption.

<sup>65</sup> Numerous campaigns on sustainable consumption can be found on UNEP DTIE's website through this database: <http://www.unep.fr/scp/communications/ad/list.asp?cat=all>

<sup>66</sup> For more information on these initiatives: [http://www.coe.int/t/dg3/socialpolicies/platform/Observatory/pracRespCon\\_en.asp](http://www.coe.int/t/dg3/socialpolicies/platform/Observatory/pracRespCon_en.asp)

<sup>67</sup> To download this publication: <http://www.unep.fr/shared/publications/pdf/DTIx0679xPA-CommunicatingEN.pdf>

<sup>68</sup> UNESCO, *Framework for a DESD Communication Strategy in support of the UN Decade of Education for Sustainable Development*, Education Sector, 2007

<sup>69</sup> To download this publication: <http://www.unep.fr/shared/publications/pdf/DTIx0763xPA-TalkWalk.pdf>



Bring NGOs and businesses to cooperate with universities to develop courses on sustainable consumption in the framework of professional and life-long learning.

Encourage companies to integrate the sustainable consumption topics in their own training programmes.

The holistic dimension of ESC has rendered multi-stakeholder cooperation a common practice that calls for further development, especially at the local level. From formal education to public awareness, it has been recognised that education for sustainable consumption should be designed as a transversal approach requiring the involvement of all actors: public authorities, educational institutions and actors, youth networks, civil society, businesses, development and cooperation actors. NGOs concerned with sustainability and more specifically with sustainable consumption are particularly likely to build partnerships with other educational actors and stakeholders. For example, ANPED, Eco Forum and EEB among other NGOs are prepared to cooperate as partners in concrete national and international projects towards sustainable consumption and production to provide reliable public information and education as well as to ensure the accountability of policy makers (Ostend NGO Statement towards Sustainable Consumption and Production Patterns, EU Stakeholder Meeting 24-26.11.2004).<sup>70</sup>

As mentioned above, formal and non-formal education on sustainable consumption are efficiently implemented through cooperation between education institutions and other stakeholders, especially at the local level.

- Teacher training on ESC benefits from multi-stakeholder involvement, which provides relevant and concrete resources. As an example, the College of Education at Florida Gulf Coast University, the School of Education at the Zurich University of Applied Sciences, the City of Zurich and private sponsors have developed together the Swiss International Programme (STIP), a custom-designed and university-based experience on ESD for elementary and secondary school teachers. Participants study ecology, economics, social and political issues pertinent to their respective countries in the world and learn how to understand the environmental and social impacts of their decisions as individuals.<sup>71</sup>
- Overall, educators can cooperate with a great variety of partners (governments, civil society, media, businesses) in order to improve the quality of education on sustainable consumption. Sandwatch, a project supported by UNESCO, is a significant example in this regard. First developed locally then spread internationally, Sandwatch is a volunteer network of students, teachers, youth groups, non-governmental and community based organizations working together to modify lifestyles and to develop awareness of marine and coastal fragile environments. It started in 1999 in the Caribbean and has become an inter-regional project involving other islands in Europe, Africa, Asia and South America. Education tools have been

<sup>70</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.17

<sup>71</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005, p. 40

developed through this project such as guidelines for students to develop sustainable approaches to solve the problems facing their local environments.<sup>72</sup>

Specific initiatives and tools, built on the multi-stakeholder cooperation principles, have been developed at the international level:

- A new Partnership on Education and Research on Responsible Living (PERL) has been built involving UNEP, the former Consumer Citizenship Network (CCN) through Hedmark University College, UNESCO, the Marrakech Task Forces on Sustainable Lifestyles led by Sweden and on ESC led by Italy. The objectives of this partnership are to foster research on social innovation and responsibility, give visibility to creative communities at the local level, foster ESC through consumer citizenship, tools and guidance, as well as to produce recommendations for sustainable lifestyles and ESC.
- The United Nations University develops Regional Centres of Expertise on ESD, aimed at involving universities in community sustainability plans and strategies. Those centres bring together educators (schools and universities but also zoos, museums, NGOs, corporate trainers) and sources of relevant local information (governments, private sector, researchers) to enhance the quality of education as well as sense of citizenship. This model could be adapted to ESC as building coalitions and partnerships between individuals and organisations can provide up-to-date bases of expertise upon which teachers and students can draw.<sup>73</sup>
- The 2008 UNEP/UNESCO YouthXchange Training Kit on Sustainable Consumption (available in over 20 languages and through a complementary English/French website) is a training tool that aims to promote sustainable consumption patterns among young consumers worldwide. It provides statistics, case studies of community-based consumer actions, games, and alternatives for more sustainable lifestyles in a clear and entertaining approach to how sustainable development issues affect the daily lives of consumers. In the latest edition of the guidebook are the following features: a clear link between our consumption patterns and climate change, a more substantial e-waste section, updated data and scientific information and two new chapters: one on the UN Decade on Education for Sustainable Development and one on ethical fashion. Among these novelties, the guide strikes a balance between youths' consumer aspirations while at the same time being aware of the impact of their consumption on, for example, climate change.<sup>74</sup>
- The LOLA project (Looking for Likely Alternatives), launched in 2005 within the Consumer Citizenship Network, contains a learning and teaching pack that is focused on strengthening the connection between students and local communities to identify, evaluate and document cases of social innovation towards sustainable lifestyles.<sup>75</sup>

*Here and Now!* contains several recommendations on building partnerships between education institutions (schools and universities) and local stakeholders, including non-educational actors

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<sup>72</sup> For more information: <http://www.sandwatch.ca/>

<sup>73</sup> UNESCO, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, Technical Paper N°2, Education Sector, October 2005, p.55

<sup>74</sup> YouthXchange website: <http://www.youthxchange.net>

<sup>75</sup> For more information on Lola: <http://www.sustainable-everyday.net/lolaprocess/>

outside the school: it highlights the need to *strengthen connections between researchers, lecturers, teacher trainers and socio-economic actors and stakeholders*, which can also involve *intergenerational learning* as an integrated aspect of education for sustainable consumption.

The integration of ESC in *professional training*, while being developed, should also build on multi-stakeholder cooperation and partnerships. Although ESC is still rarely integrated in professional training institutions and programmes, it is clear that students and professionals benefit from the experience of various actors such as NGOs and businesses in this field. Such partnerships can be developed with universities: for example, in Kenya, non-governmental organisations (Consumers' Voice, Consumer Unity and Trust Society, Youth Education Network) have cooperated with universities such as Kenyatta University and Nairobi University in presenting courses on consumer issues, including sustainable consumption.<sup>76</sup> This could be developed within other institutions and organisations involved in professional and life-long learning, as well as within companies' training programmes.

In the field of communication and awareness-raising, these kind of multi-stakeholders partnerships are often used as a dissemination tool. The ADEME's national campaigns on energy use and waste management, mentioned above, are spread locally through numerous partnerships and events. Another concrete example of local partnership to promote sustainable consumption is the initiative developed in the city of Heidelberg (Germany), where consumers have access to a card for purchasing 'sustainable' goods and services (the "Umwelt.plus.karte" or "eco-plus" card). This card was launched in 2002 and instigated by the Institute for Research on the Ecological Economy, the municipal department responsible for *Agenda 21* and various local NGOs. An advertising agency is responsible for the operation, which receives 45,000 euros in funding from the Federal Ministry of Education and Research. This initiative has brought together more than 1700 users who can benefit from discounts on purchases and created a local network to foster social cohesion and good neighbourhood relations.<sup>77</sup>

## 5.6 Evaluating Education for Sustainable Consumption

*How can we assess the impact of ESC on attitudes and behaviours in educational institutions, at work and within the private sphere?*

### Proposal

Encourage governments to follow and facilitate the development of ESC by sharing good practices, establishing indicators of progress and implementing mechanisms for monitoring.

Encourage businesses and marketing specialists to communicate on the state of the markets and consumption trends.

Develop tools (including indicators, markets analysis) to assist projects, from formal education to awareness-raising, in defining clear targets and evaluation objectives and to communicate on their impacts in order to share information with other ESC actors.

<sup>76</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.17

<sup>77</sup> More information, visit the website of the Council of Europe (Social Policy): [http://www.coe.int/t/dg3/socialpolicies/platform/Observatory/pracRespCon\\_en.asp](http://www.coe.int/t/dg3/socialpolicies/platform/Observatory/pracRespCon_en.asp)

Assessing and analysing the impacts of ESC on perceptions, attitudes and behaviours among individuals but also among institutions and organisations from the public and private spheres is a necessary condition to adapt ESC efficiently to diverse populations, targets and societies. As highlighted in *Here and Now!* “Education for sustainable consumption is, by definition, a form of education which evolves and requires modification and updating. Many topics which today are central to education for sustainable development were topics not imagined fifty years ago.”<sup>78</sup>

- Efficient ESC implementation also rests on a good understanding of the perceptions from various targets, and especially among young people. In this regards, research and reporting have a core role to play. The research networks working on ESC (Consumer Citizenship Network, SCORE, RESOLVE, etc.) are continuously conducting surveys and collecting useful data on people’s availability towards sustainability issues as related to their everyday life and also on the way they react to ESC actions. International organisations, such as the OECD or UNEP also run such surveys.
  
- Evaluating ESC, in order to enhance and update it on a regular basis, also means assessing the impacts of ESC policies and actions, in whatever field, on the project specificity itself and on both people’s attitudes and behaviours. Every project, in formal and non-formal education, professional training or awareness-raising should include clear targets and evaluation objectives that can be used for future developments and shared with other actors of ESC. Indicators of different kinds can be used: such as a number of partners involved in the project, population reached, impact in the media, life-length of the project, economic benefits including social and environmental criteria, impacts on representations and behaviours (through surveys, market research with the contribution of businesses). The latter is certainly the most difficult to measure.
  
- National public institutions are fully concerned with ESC evaluation when they have the means to create platforms where data can be collected from ESC actors, centralised and disseminated. This stands as a strong recommendation of *Here and Now!*  
By sharing good practices, establishing indicators of progress and implementing mechanisms for monitoring, governments can follow and facilitate the development of education for sustainable consumption in their country.<sup>79</sup>
  
- The United Nations Economic Commission for Europe has set up an Expert Group on Indicators for Education for Sustainable Development which report was released early 2008.

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<sup>78</sup> Marrakech Task force on Education for Sustainable Consumption, Hedmark University College, United Nations Environment Programme, *Here and Now! Education for Sustainable Consumption. Guidelines and Recommendations*, 2008, p.8

<sup>79</sup> Op.cit.

**CHAPTER SIX**  
**GREEN PROCUREMENT IN CHINA:**  
**BACKGROUND REPORT**

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## **6.1 Chinese Government Procurement**

Government procurement refers to the action of governments and institutions at all levels as well as organisations that spend public funds to procure the goods, projects and services listed in the collective procurement catalogue which is developed according to law (or to procure the goods, projects and services that go beyond the normal limit). Procurement refers to the action of obtaining paid goods, project and services in the form of contract, including purchase, lease, consignment and employment.

The government procurement system is an important item in the administration of public funds and a basic means with which the State administrates direct expenditure. Because the significant achievements of government procurement in such areas as the enhancement of the management of public expenditure, saving financial capital and promotion of social and economic development, more and more countries in the world adopt green government procurement systems. With the change of the objective and contents of government procurement in each country, these government procurement frameworks gain a significant improvement for effecting sustainable consumption.

### **6.1.1 Current Situation of Government Procurement in China**

The Ministry of Finance supported the local governments such as Shanghai and Shenzhen to carry out the first trial of government procurement in 1996. In 1998, about 3.1 billion Yuan was spent in government procurement across China, and this figure rose to around 11 billion Yuan in 1999 (accounting for 1% of the national financial expenditure for that year). In April 1999, the Finance and Economy Committee of NPC set up the task force on government procurement legislation, thus officially launching the drafting process of the Government Procurement Law. Meanwhile, to address the problem of a lack of unified procedures in government procurement, the Ministry of Finance started the development of a national unified policy on government procurement and issued a series of administrative regulations.

Together with the Law of the People's Republic of China on Bid Invitation Bidding Law adopted by the Standing Committee of NPC on August 30<sup>th</sup>, 1999, these regulations constitute the primary framework of a government procurement system and played an important regulatory role for the development of government procurement in China. The Law on Government Procurement was officially promulgated on June 29<sup>th</sup>, 2002 and came into effect as of January 1<sup>st</sup>, 2003. Furthermore, the current practice of government procurement has been further standardized. An overall

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<sup>1</sup> *The Administrative Office of Ministry of Environmental Protection*

<sup>2</sup> *The Environmental Certification Center of Ministry of Environmental Protection*

framework has been developed that addresses collective government procurement, collective department procurement, individual procurement, open bidding invitation and support by further procurement methods. Since this milestone reform and with increasing intensity, government procurement has paid more attention to the products from medium and small sized enterprises, environment-friendly products and innovative products. In a word, government procurement has become a means of national macro regulation.

The scale of government procurement in China has continuously grown since the adoption of the government procurement system in 2003. According to the statistics of the Ministry of Finance, the actual budget for government procurement in 2006 was 412.22 billion Yuan, and actual procurement expenditure was 368.16 billion Yuan (up by 25.8% than that of 2005). A total of 44.06 billion Yuan was saved with a saving rate of 10.7%. Among them, the expenditure of local government procurement was 321.1 billion Yuan, and government procurement expenditure of the central government reached 47.06 billion Yuan (up by 27.4% and 15.4% respectively compared with that of the last year). The expenditure of government procurement of that year made up 14.9% of the total financial expenditure (up by 6.2 percentage points compared with that of the last year) and accounted for 1.8% of national GDP (up by 0.2 percentage point compared with that of last year). The annual growth of government procurement was 68.1% from 1998 to 2006.

At present, government procurement in China has the following characteristics:

**(1) Procurement of engineering and services grows rapidly.**

The engineering procurement amount across China was 94.83 billion Yuan, 176.39 billion Yuan and 132.33 billion Yuan respectively during 2004-2006 (up by 44.1%, 86% and 33.3% respectively compared with that of the last year). This accounts for 44%, 46% and 47.9% of the overall procurement amount for each year. The procurement amount for services in 2004, 2005 and 2006 was 13.84 billion Yuan, 19.57 billion Yuan and 27.03 billion Yuan (up by 33.3%, 41.4% and 38.1% respectively compared with that of the last year). Apart from the supply of fixed refuel and repair for automobiles, unified procurement of insurance and fixed meeting venue by agreement, many regions have begun to include many service activities into their government green procurement strategy, such as air tickets for government officials, development and consultation of information network, bank agent, legal consultation, supervision on construction, property management, lease of vehicles, sanitation and cleaning, training of enterprise's employees and maintenance of public green land.

**(2) Government procurement by the central government has increased continuously.**

Total procurement expenditure of the departments of the central government reached 29.3 billion Yuan, 40.78 billion Yuan and 47.06 billion Yuan respectively in 2004, 2005 and 2006 (up by 11%, 39.2% and 15.4% compared with the previous year). Local government procurement also enjoyed relatively fast growth. In 2006, ten provinces and municipalities had total expenditure amounts on government procurement over 10 billion Yuan in total worth 205.12 billion Yuan, accounting for 63.9% of total amount of local government procurement capital. There were 13 provinces and municipalities with procurement expenditure ranging from 5 to 10 billion Yuan (up by 8 compared with the previous year).

**(3) Procurement with the bidding invitation to the public has been mainstreamed.**

In 2006, a total of 248.94 billion Yuan of government procurement occurred through public bidding, accounting for 67.6% of the total (up by 2.1 percentage points compared with that of 2005). The main reason for this growth is that government at all levels set compulsory goals for the amount and type of projects allowed to go with open tendering. In the case of the need for the application of a non-open tendering method, the relevant department shall report it to the financial department for review and approval.

Engineering projects are procured mainly by open tendering method. In 2006, the total expenditure of engineering projects across China by open tendering reached 146.44 billion Yuan, thus making up 83% of the total engineering project expenditure. Most office common items and service items were procured by way of negotiated goods supply.

**(4) Collective procurement is a main means of government procurement.**

In 2006, total procurement expenditure of collective government procurement across China reached at 218.75 billion Yuan, accounting for 59.4% of the total. Among them, the collective procurement expenditure of local governments was 208.33 billion Yuan, and that of the departments of the central government was 10.42 billion Yuan. The collective procurement expenditure of departments reached 79.82 billion Yuan, accounting for 21.7% of total procurement expenditure. Among them, 62.57 billion Yuan was spent by local departments and 17.25 billion Yuan was collectively spent by the departments of the central government.

**(5) The mechanisms for handling the complaints from the suppliers of government procurement has gradually improved.**

In 2006, the central financial department and local financial department at all levels received 760 complaints by the suppliers and handled 629 of them. Among them, they made sanctions for 352 cases, rejected 183 cases and 94 cases retracted the charge.

**(6) The information announcement and management of review experts has further standardized.**

To ensure healthy and fast development of the reform of government procurement, in 2006, MoF took information announcement and expert selection links as the focus for standardizing government procurement practice. There were a total of 181,198 public announcements across China in 2006. MoF and the financial department of each province have established a pool of "government procurement experts" through a uniform skills and training programme. These experts are then "used" by the various government structures in need of procurement expertise. In 2006, a total of 67,893 projects involved the advice of these government procurement experts with 166,793 requests for advice and 280,261 people involved in the review.

### **6.1.2 Relevant Laws and Regulations**

The System of Government procurement in China is composed of three levels: laws on government procurement, administrative regulations on government procurement and established methods for such procurement. At present, only the Law of the People's Republic of China on Government Procurement promulgated in 2003 focuses on this area. Meanwhile, government procurement activities shall comply with other laws such as Contract Law of the People's Republic of China and Law of the People's Republic of China on Administrative Supervision.

Tentative measures on procurement were first adopted in 1999, with the Provisional Measures of Ministry of Finance of the People's Republic of China on the Management of Government Procurement (this law has been cancelled) and the Law of the People's Republic of China on Invitation to Bid and Bidding. In 2002, China promulgated the Law of the People's Republic of China on Government Procurement, marking the primary establishment of a principle framework of government procurement in China.

China has since issued other regulations to make public procurement more sensitive to political priorities of China's government. These are for instance compulsory requirements that domestic goods shall be prioritised in government procurement. However the scope for such measures has been limited by the fact that China signed the Government Procurement Agreement (GPA). GPA aims at requiring each party to open its government procurement market and reforming government procurement system in accordance with GPA. The accession to GPA will have far-reaching influence on the legal system in regards to government procurement and each sector in China. The Chinese Government officially signed the application for participating GPA under WTO and submitted the primary list of the Chinese Government to the open market for government procurement on December 28, 2007. Since its accession to GPA, the Chinese Government procurement has entered into a new phase of development.

### **6.1.3 Procedures and Method**

China takes the open tender procurement method as the first preference for government procurement. The invitation of bid and procurement procedures usually include such processes as invitation to bid, bidding, opening of bids, commenting on a tender and deciding on a bid.

Government procurement procedures in China include the following major steps:

- (1) Identify procurement demand;
- (2) Choose procurement method;
- (3) Qualification review;
- (4) Carry out the procurement method;
- (5) Sign procurement contract;
- (6) Fulfill procurement contract;
- (7) Check and acceptance;
- (8) Settlement;
- (9) Benefits assessment.

Among these steps, the first five are the development stage of the procurement contract and the last four are part of the contract management stage.

Government procurement procedures refer to the legitimate ways with which the government may employ to spend funds in procuring goods, projects and services according to different conditions. The procedures of government procurement in China are various and depend on the objective, contents, scale and conditions of the purchase. In general, they are classified into the following six types:

#### **(1) Open invitation to bid procurement:**

This refers to the process in which the procurement party, according to legal procedures, invites all potential suppliers without any designation to take part in bidding by issuing an announcement on



invitation to bid; with pre-set standard, the procurement party chooses the best supplier who wins the bid. Finally, the procurement party signs the government procurement contract with the supplier who wins the bid.

**(2) Invitation to public bidding procurement (or restricted/selective bidding):**

This refers to the process in which the procurement party, according to the credit and performance of candidate suppliers, selects several suppliers and issues invitations to bid to them only. After the competition of the invited suppliers, the procurement party identifies the supplier who won the bid.

**(3) Competitive negotiation:**

This refers to the procurement method with which the procurement party finally chooses the best supplier after negotiations with many suppliers.

**(4) Unitary source procurement:**

This refers to the procurement method with which the procurement party, has to procure from one supplier only either because this is the only one on the market, or in conditions of extreme urgency, in cases of force merger, or in cases of an extension of an existing contract to purchase an extra quantity of goods that are already object of an existing contract (extra vehicles or ITC systems, etc.).

**(5) Inquiry:**

This refers to the procurement method with which the procurement party issues an inquiry list to relevant suppliers asking them to make an offer which compares the quotation and identifies the best supplier. This is so called “shopping around” and is a simple and fast procurement method.

**(6) Other procurement methods**

There are a few extra procurement methods that approved out with the normal procedures by the government procurement supervision and management department affiliated to the State Council: In cases that the above 5 procurement methods are not appropriate, there are other procurement methods approved by the State Council, e.g. batch procurement, small amount procurement and fixed procurement, etc. Therefore, to meet complex and changeable requirements, China makes the legal regulations on the six kinds of procurement. It needs to be pointed out that whatever procurement method in the above six is selected, it cannot be carried out until it receives the approval of the supervision and administrative department of the State Council. The ways and procedures of government procurement (GP) in China are seen in the Figure 6.1 (on the following page).

## **6.2 Green Public Procurement in China**

### **6.2.1 Concept and Background**

Green Public Procurement refers to the practice of public purchasing in which the government selects the products and services with minimum threat to human health, minimum resource consumption and minimum adverse impacts on the environment based on the consideration of the whole life-cycle of the products. The Green Public Procurement systems include the laws and regulations, organisation and management regimes allowing the procurement goods, services and technologies in a manner that encourages the development and production of environment-friendly

products and services. Bringing into play the role of government policy to regulate the economy and to explore the approaches/ methods for achieving the policy objectives of the government procurement system is one of the tasks empowered by law to this system. The inevitable requirement for the development of a public finance management system under a socialist market economy is also empowered to this system.

Green Public Procurement is an important measure in support of other policy priorities such as reduction of public financial expenditure, effective promotion of the application of new technologies, energy saving, promotion and cultivation of the market for energy saving products, environmental protection and so on. Green procurement also brings into play the role of government financial and taxation system in adjusting the market. Green Public Procurement has gained the high attention of the Chinese Government due to the following features.

**(1) Green Public Procurement system has a model function:**

This is an important policy measure for regulating macro-economy and for promoting structural adjustment of industries and products. In general, government procurement contributes a significant proportion of GDP and is sizeable enough to have a strong influence on the market share of products and consumption orientations.

When China adopted the Law on Government Procurement in 2003, the expenditure of such procurement reached 165.94 billion Yuan, making up 1.6% of total GDP of the year (up by 64.4% compared with that of 2002). The expenditure of government procurement of China in 2006 went up to 368.16 billion Yuan. With this, a large amount of funding was put into the market to purchase green products and green services in order to meet national standards for environmental protection and recycling of resources. Meeting the green standard conducive to health will surely impose significant impacts on the products and industrial structure in China.

**(2) Green Public Procurement can raise public environmental awareness:**

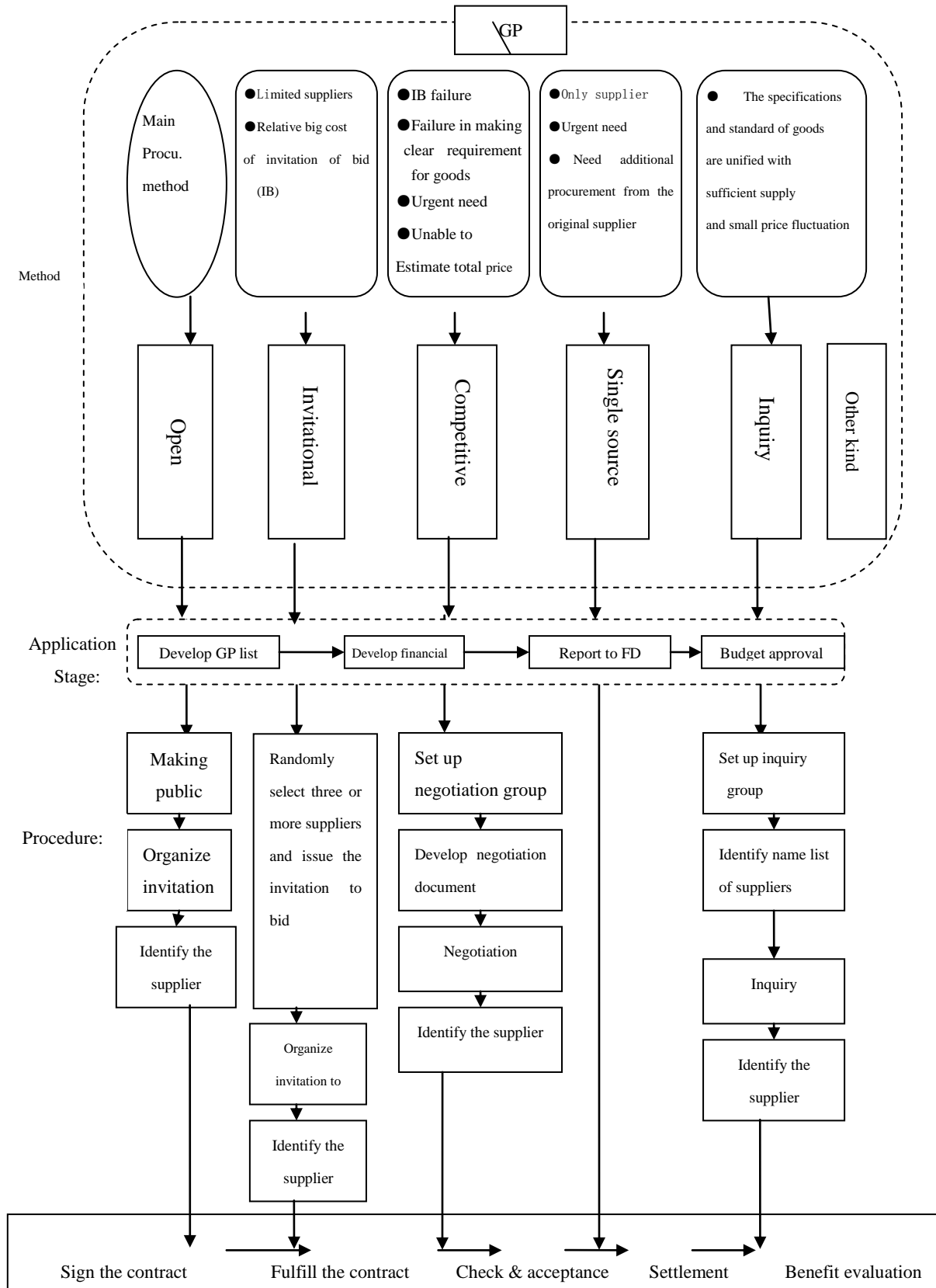
This can accelerate the development of a “green” consumption market. As a government initiative Green Public Procurement plays an important guiding and demonstration role for consumers and the consumer market. Clear evidence demonstrates that under the pilot phase of Green Public Procurement over the past few years in China, environmental awareness of consumers in China has improved significantly and has included the advancement of high enthusiasm for sustainable consumption.

**(3) Green Public Procurement can improve corporate environmental awareness:**

This facilitates and promotes companies to strengthen and improve their environmental management and is conducive to the implementation of the national strategy on sustainable production. The Green Public Procurement system and the government’s behaviour towards green procurement will produce active influence on suppliers. To win high level bids for, suppliers must improve the environmental performance of their products and raise their corporate management level with technological innovation. Green Public Procurement can also promote the development of green industries and technologies and is conducive to the development of a sustainable production system.

FIGURE 6.1 – METHOD AND PROCEDURES OF GOVERNMENT PROCUREMENT IN CHINA

(FD = financial department)



### **6.2.2 Policy Framework and Procedures**

In view of the fact that green products usually have to compete with conventional products in government procurement in terms of price, China has introduced the very effective practice of many developed countries, i.e. the development of some compulsory regulations or policies to promote green markets in the initial implementation period of green procurement.

In recent years, the Chinese Government has fully understood the importance of harmonious development between economic growth and environmental protection, and has endorsed the overall goal of adhering to the outlook on scientific development and building an “environment-friendly and resource saving society”. It takes the improvement of the environment as one of the targets for building a well-off society in a holistic approach. The Chinese Government is also convinced of the importance of Green Public Procurement in building an “environment-friendly and resource saving society”, and has published a series of laws and regulations to support and lead the development of Green Public Procurement in China.

On June 29<sup>th</sup>, 2002, The Chinese Government initiated the Law of the People's Republic of China on Government Procurement which presents principle requirement for Green Public Procurement. Article 9 of the Law clearly identifies the environmental protection objective of government procurement: “Government procurement shall prioritise the procurement of high-technology and environment-friendly products, promote the development of enterprises in environmental protection industry and ensure sustainable development of economy.” This provides legal basis for China to carry out Green Public Procurement work.

On October 17<sup>th</sup>, 2003, the National Development and Reform Commission (NDRC), the Ministry of Environmental Protection (MEP) and other relative ministries jointly issued “The Opinion on the Acceleration of Carrying Out Clean Production”, which prescribed that the people’s governments and relevant departments at all levels shall take the lead in advocating green consumption. The products meeting relevant requirements for saving energy and water, recycling of waste, and in favor of the protection of the environment/natural resources shall be prioritised in the government’s procurement plan.

On December 17<sup>th</sup>, 2004, the National Development and Reform Commission (NDRC) and the Ministry of Finance (MF) jointly issued “The opinion on the Implementation of Government Procurement of Energy Saving Products”. This requires that government departments, institutions and organisations at all levels shall prioritise the procurement of energy saving products and gradually phase out low-energy efficiency products. The Suggestions are attached with the List of Energy Saving Products for Government Procurement, which includes two types of products, i.e. energy saving products and water saving products.

On July 2<sup>nd</sup>, 2005, the Chinese State Council circulated “Several Opinions of the State Council on Accelerating the Development of Circular Economy (No.[2005] 22 document of the State Council)”, which required: “In consumption course, efforts shall be made to advocate the consumption pattern conducive to resource saving and environmental protection, encourage the use of products with energy-efficiency label, products with certification on energy and water conservation and those with environmental label or green label as well as organic label, reduce excessive packaging and utilisation of throw-away products. Government institutions shall carry out green procurement.”

On December 3<sup>rd</sup>, 2005, the Chinese State Council promulgated “The Decision of the State Council on the Implementation of the Outlook on Scientific Development and Strengthening Environmental Protection (No. [2005]39 document of State Council)”, which stresses: “In consumption course, more efforts shall be made to advocate environment-friendly consumption pattern, promote eco-labels, environmental certification and Green Public Procurement system, and improve the recycling and reuse system for renewable resources.”

On April 17<sup>th</sup>, 2006, at the 6th National Conference on Environmental Protection held in 2006, Premier Wen Jiabao highlighted that we should “stress the application of market mechanism to facilitate environmental protection. With the application of pricing lever, we should set up the incentive mechanism that facilitates enterprises to protect the environment and constraint mechanism that urges enterprises to reduce the discharge of pollutants.” Under continuous promotion of the Chinese Government, China gradually begins the implementation of Green Public Procurement system.

On Oct 24<sup>th</sup>, 2006, with deepening development of Green Public Procurement in China, MoF and SEPA (now Ministry of Environmental Protection) jointly issued “The Suggestions on the Implementation of Government Procurement of Eco-labeled Products” to fully bring into play the environmental protection functions of government procurement. It requires that when government departments, institutions and organisations at all levels use financial capital for procurement they shall firstly purchase eco-labeled products and shall not procure products that threaten the environment and human health. “The Suggestions on the Implementation of Government Procurement of Eco-labeled Products” were officially carried out in the units that utilise central and provincial budget (including the municipal budget of cities under separate plan of the State Council) from January 1, 2007 and comprehensively carried out across China from January 1, 2008.

The inventory on Government Procurement of Eco-labeled Products was issued together with “The Suggestions on the Implementation of Government Procurement of Eco-labeled Products”. The Ministry of Finance and the State Environmental Protection Administration shall comprehensively consider the development of governmental procurement reform and technology and the marketing of eco-labeled products. They shall identify the scope of preferential procurement according to the categories of eco-labeled products that are certified by the eco-labeled product certification organisation accredited by the state. They will then release “The Government Procurement List on Eco-labeled Products”. The MoF and SEPA will adjust the List in proper time and issue it as a formal document. MOF and MEP (former SEPA) will keep the list updated and make it publicly available. In March of 2007 for instance, the first list covered 14 products categories involving 81 companies. In 2008, the List on Government Procurement of Eco-labeled Products covers 14 types of products involving 444 companies. This shows a clear increase in the offer of eco-labeled products and therefore a higher potential for implementation of Green Public Procurement for those product categories.

On June 3<sup>rd</sup>, 2007, The State Council published “The Notice of Integrated working scheme for Energy-saving”. Article 45 of this notice stipulates that in order to enhance the energy-saving and green procurement and fulfill strictly “Opinion on the Implementing of Governmental Procurement of Eco-labeled Products” it is necessary to improve the system of Governmental Procurement List of Eco-labeled Products and enlarge the scope of procurement opportunities. In this notice, office

equipments including air conditioner, computer, printer, display, data multifunctional devices and lighting product, water-consumption apparatus were changed from “procurement with priority” to “mandatory procurement”.

### **6.2.3 Scope**

At present, the Ministry of Finance and the Ministry of Environmental Protection are responsible for the promotion of Green Public Procurement in China. The government procurement products and services in China have gained a wide range with many product categories being purchased. Each of these categories have of course their own different characteristics in terms of composition, operational mode, consumption pattern of energy and resources, management and maintenance. Furthermore, the Chinese Government proceeds with such a policy in a careful and strategic manner, therefore, the Chinese government has identified priority procurement areas based on the function, quality and environmental impacts of the target products or service in the early stage of green procurement with the consideration for the following when choosing the Green Public Procurement products: a) environmental impacts; b) price of the product/affordability; c) potential for the development of a green market; d) product information; and e) procurement amount.

At present, the main types of products obtained under Green Public Procurement system of China are office consumables, cleaning products, IT equipment, office equipment, vehicles and building materials. They are all products used directly by the government and which the government spends significant funds in procuring. They are also identified as areas with high energy consumption and relatively big environmental impacts.

### **6.2.4 Standards and Labels**

To help and encourage consumers or enterprises to choose green products and services, some countries in the world have developed the eco-label to provide a range of environmental information or environmental features regarding the products or services. Eco-labels are based on the certified study on the environmental impacts of the whole life-cycle of the products – the application of cradle-to-grave analysis method with reliable and sound scientific information. This provides valuable information about the product, from the access of raw materials in pre-production stage, the production and marketing stages to the products final disposal. Eco-labels are certified by an independent, third-party and from this obtain their credibility.

The Global Eco-labelling Network (GEN) supports the activities of many government departments, NGOs and private sectors in the world carry out eco-label programmes, conduct the third-party authentication on products and grant eco-labels. This practice has positive impacts on the selection of green products by consumers and is reliable.

Investigations in eight European Union and Asian countries carried out by GEN show that: ISO Type I environmental labels have a better potential in support of green procurement due their high visibility, reliability, small conflicts for stakeholders, good fairness of the authentication process and quantitative indicators for the test of products.

Therefore, to meet different procurement requirements, the Chinese Government has recently adopted the China Environment Label as the requirement for GPP. The development of the China Environment Label Standard is suitable and credible for public procurement because it is based on

the assessment of life-cycle of the product and participated in by many stakeholders such as government departments, groups, consumers, producers, marketers and environmental organizations. The Standard is also recognised to fully reflect the concerns of all relevant stakeholders.

### **6.2.5 Supporting Measures for Green Procurement**

The development of an information network to ensure timely and clear delivery of green procurement information is a prerequisite for green procurement. With the increasing development of green procurement in the world, governments and society recognise that public policy has to be developed and implemented in the context of the globalisation of markets, and in particular when it involves bilateral and multi-lateral green trade issues. Therefore, apart from paying attention to domestic information about green procurement, each country must pay more attention to international information about green procurement. This requires not only the enhancement of communication between manufacturers, buyers and consumers, but also necessitates the intensification of the sharing and exchange of information about green procurement among different government departments and countries.

It is thus essential to establish a comprehensive information platform. The most effective approach is to develop a procurement network shared by various stakeholders. Internal Green Procurement Network (IGPN) set up at the First International Conference on Green Procurement held in 2004 has been a great success in Asia because it responds to this need. Members participating in IGPN include international institutions, enterprises, government departments and agencies, local groups and NGOs.

At present, the official media of the List on Government Procurement of Eco-labeled Products include China Government Procurement Network (<http://www.ccgpn.gov.cn/>), website of the Ministry of Environmental Protection of People's Republic of China (formerly SEPA) (<http://www.sepa.gov.cn/>) and China Green Procurement Network (<http://www.cgpn.cn/>). Among them, China Green Procurement Network (CGPN) was set up in 2006 by Environment and Development Center of Ministry of Environmental Protection based on the experience of the International Green Procurement Network (IGPN).

The main work of CGPN is to collect the information on systems, laws and regulations on green procurement in each country of the world, gather information about green products and provide experience and information to facilitate the implementation of green procurement. CGPN also serves the essential purpose of providing a platform for enterprises to showcase their green products thus improving the knowledge of procurers about the market options for greener products.

### **6.3 Obstacles for Green Public Procurement in China and Policy Recommendations**

The above analysis on the obstacles to government procurement of green copying machines highlights that Green Public Procurement in China has to deal with the following problems:

#### **1) Relevant policies are not complete:**

Because of the issue of price, green products usually cannot compete with traditional products in

government procurement procedures. Some compulsory regulations or policies are needed to facilitate the operation of green market in early implementation stage of green procurement. However, apart from the release of the “Suggestions on the Implementation of Government Procurement of Eco-labeled Products” and the “Suggestions on the Implementation of Government Procurement of Energy Saving Products”, China has not issued other policies to promote Green Public Procurement.

**(2) Lack of green products in the market:**

Because there is currently a relative small market share for green product due to low popularity and high price, enterprises lack the driving force and technologies to develop green products. Therefore, there is a relatively small amount of green products available for government procurement.

**(3) Lack of training for relevant people:**

The descriptions in the previous sections show that stakeholders of Green Public Procurement include government procurement staff, experts commenting on the bidding process, suppliers, and the staff of the government’s procurement supervision and management departments who have the responsibility for supervision and administration. However, these stakeholders often have a limited amount of training in terms of environmental awareness and knowledge about green products.

**(4) Inefficient access to information about green procurement:**

Environmental information is an important element for the development of Green Public Procurement. The issuing of eco-labelled product lists and its public availability, the active obtaining of environmental information about relevant products, marketing enterprises and the information issued in accordance with certain standards together constitute an important foundation for the implementation of and supervision on green procurement. Nowadays there are only a few companies on the List of Green Public Procurement, furthermore the communication and information exchange between the Government departments and the companies as well as between businesses is weak and inefficient.

**(5) Monitoring and evaluation:**

To accurately identify green products and services, the monitoring of the effect of green procurement is indispensable to distinguish the improvements and the existing problems. However, Green Procurement is still at the beginning stage here in China, and thus the necessary expertise is lacking in this field. We hope that with the introduction of relevant systems and knowledge on Green Procurement from developed countries, better measures for China to carry out Green Public Procurement will be identified and explored gradually.



## CHAPTER SEVEN

### NATIONAL POLICY AND STRATEGIES FOR SUSTAINABLE CONSUMPTION IN JAPAN

*Mr. Yoshifumi Ayusawa<sup>1</sup>*

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#### **7.1 Introduction**

This paper explains the national policy scheme of consumer education for sustainable development in Japan. It consists of three parts; the first one is the actions regarding Education for Sustainable Development (ESD) as an overall framework, the second one is the basic scheme of consumer policy and consumer education based on the Consumer Basic Act and the Consumer Basic Plan, and the third one is the Multi-stakeholder Forum on Social Responsibility for a Sustainable Future as a recent development

#### **7.2 Education for Sustainable Development<sup>3</sup>**

##### **7.2.1 UNDESD and Japan**

In the World Summit on Sustainable Development (the Johannesburg Summit) in 2002, a recommendation to the UN General Assembly to consider adopting the “Decade of Education for Sustainable Development (DESD)” was included in the Implementation Plan as a result of the proposal from the Japanese Government and NGOs. Japan submitted a resolution as one of the 40 co-sponsors to designate the 10 years from 2005 as the “UN Decade of Education for Sustainable Development (UNDESD)” at the 57th UN General Assembly in 2002 and the proposal was adopted unanimously. In order to contribute to the world as the country that proposed ESD, Japan is working to promote ESD globally through UNESCO, the United Nations University, and other partner organisations.

##### **7.2.2 Features of ESD in Japan**

Even before the start of the UNDESD, various activities on participatory, problem-solving learning that incorporate environmental, economic, and social perspectives had been conducted not only in schools but also in institutions of higher education, social educational facilities, communities, enterprises, and other venues in diverse educational fields including environmental education,

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<sup>2</sup> Deputy Director, Quality-of-Life Policy Bureau, Cabinet Office of Japan

<sup>3</sup> Ministry of Environment (2009)

human rights and welfare education, peace education, and development education. These have evolved or integrated into actions in partnership with ESD and developed into efforts to build sustainable communities by linking the wisdom of traditional lifestyles with natural, industrial, and cultural resources and also with the school curriculum. In line with the development of ESD, these activities are increasingly pursued through partnerships involving schools, community centers and other local government bodies, NGOs/NPOs, institutions of higher education, enterprises, and others.

### **7.2.3 Effects**

ESD in school education has led to the cultivation of “zest for living (vigorously in difficult times).” Also, ESD rooted in local communities is a powerful tool for building and revitalising communities. It enables residents to discover the qualities of their community, nurtures affection for and pride in the community, and raises people’s awareness as members of the community.

### **7.2.4 Implementation Scheme of the Government**

The government established the Interministerial Meeting on the “United Nations Decade of Education for Sustainable Development” within the Cabinet, which is composed of 11 ministries and agencies including the Cabinet Secretariat, the Ministry of Foreign Affairs, the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and the Ministry of the Environment (MOE). The mission of the meeting is the close coordination among administrative bodies concerned with implementing the measures related to the UNDESD and to promote the effective and comprehensive implementation of the measures. It is implementing various measures to promote ESD, principally by incorporating “sustainability” into the aims and content of education and learning and by creating and supporting partnerships among diverse actors.

The Interministerial Meeting has drafted Japan’s Action Plan for the UNDESD (hereinafter “the Action Plan”) in March 2006. The Action Plan states, as the guiding principles for Implementing ESD, “Programs Leading to Community Building,” “Diverse Places of Education and Implementing Actors,” “Integrated Approach under Various Agendas,” “Learning from Participation and Experience,” “Nurturing Abilities for Social Participation,” and “Coordination and Collaboration between Diverse Actors.”

With the related ministries and agencies steadily carrying out various measures stipulated in the Action Plan, the government aims to create a world where everyone may enjoy the benefits of high-quality education and learn the values, actions, and lifestyles required for a sustainable future

and social changes, and where every organisation may participate in the creation of a sustainable society. Based on the Action Plan, the government has facilitated discussions on measures for implementing ESD by holding roundtable meetings since FY2007 as forums for exchanges of opinions among academic experts, educators, and related persons from NPOs and enterprises.

### **7.2.5 Civil Society**

Another feature of ESD implementation in Japan is the initiative taken by NGOs/NPOs in promoting ESD.

#### **(1) Japan Council on the UN Decade of Education for Sustainable Development (ESD-J)**

An NPO founded in June 2003, the Japan Council on the UN Decade of Education for Sustainable Development (ESD-J) is a networking organisation dedicated to promoting ESD in Japan and overseas through partnerships. ESD-J has formed a network of 100 organisations including NGOs/NPOs, educational institutions, enterprises, and other groups active in such fields as environmental education, development education, human rights education, and youth development and is currently engaged in such efforts as policy proposals, training, information dissemination, and international networking.

#### **(2) Asia/Pacific Cultural Centre for UNESCO (ACCU)**

Since its establishment in 1971, ACCU has been implementing various regional cooperative programs in the fields of culture, education, and personnel exchange in close collaboration with the countries of Asia and the Pacific. In response to the start of the UNDESD, ACCU has promoted the DESD by reviewing its past projects from the perspective of ESD and conveying the principles of ESD to governments, NGOs, universities, and other partner organisations in Japan and abroad through trainings and projects. It also spreads ESD to teachers and the general public by producing ESD learning materials and holding ESD photo message contests and photo exhibitions.

#### **(3) Information Exchange Meeting for UNDESD-Related Organisations**

Meetings are held to facilitate exchanges of information among UN agencies, international organisations, universities, NPOs, RCEs, and other organisations engaged in international cooperation, at which the participants assist each other's activities by sharing information on their respective efforts and on international conferences.

## **7.3 Basic Scheme of Consumer Policy and Consumer Education**

### **7.3.1 Consumer Policy in the high economic growth era**

During the expansion of mass production and the rapid industrial development of the high economic growth era from the mid-1950s, many incidents occurred that hurt consumers due to defective products and false labeling. Public interest in product safety increased markedly, and consumer awareness also grew. Against this background, the Government's structure of consumer policy regime was established in the mid-1960s, and has continued to develop ever since. For example, the Quality-of-Life Policy Bureau was established within the Economic Planning Agency in 1965, and consumer affairs divisions were set up in the Ministry of International Trade and Industry and in the Ministry of Agriculture, Forestry and Fisheries in 1964. In addition, in May 1968, the Consumer Protection Fundamental Act was established as the basic framework for consumer policies.

### **7.3.2 New Consumer Policies: From “Protection” to “Independence”**

In recent years, consumer-related problems have rapidly increased, and frequent business misconduct has greatly damaged consumer trust in business. Under these circumstances, to effectively respond to these transformations in the economy and society, implementation of new consumer policies is necessary.

#### **(1) Background of Introduction of New Consumer Policies**

*Change in Environment Surrounding Consumers:* The expansion of the market economy, the promotion of globalisation, and the rapid growth of Internet transactions have caused major changes for consumers, compared with the environment that surrounded consumers in 1968, when the Consumer Protection Fundamental Act was enacted. Because transactions systems and resolution methods have become more diversified and complicated, the imbalance regarding the abilities to obtain information and enter into negotiations between consumers and businesses has widened.

*Diversification and Complication of Consumer Problems:* Problems facing consumers have diversified; they have shifted from simple problems such as price, quality, and quantity of products to complicated problems such as dissolution and cancellation of services and contracts.

*Change in Environment Surrounding Consumer Policies:* In the 1990s and afterward, in response to the expansion of areas in which market mechanisms work well, government measures shifted away from regulation-based actions to after-the-fact, check-based actions operating under market rules. In the area of consumer policies, responses to the shift of government measures are also expected.

## **(2) New Consumer Policies and Consumer Education**

Under the circumstances mentioned above, in July 2002 the Consumer Policy Committee began conducting overall studies of consumer policies, including revising the Consumer Protection Fundamental Act, and in May 2003 put together a final report on the "Ideal Consumer Policy for the 21st Century". The report claimed that consumers should be recognized as "independent entities" instead of as "those who are protected". Based on this, a bill to revise the Consumer Protection Fundamental Act was submitted to the Diet in 2004 and was enacted as the Consumer Basic Act in May 2004.

One of the major revisions under the new Consumer Basic Act is that efforts to support consumers to become independent are regarded as the basis of consumer policies. The focus of the efforts is consumer education so that consumers can independently make decisions using their own judgment. Measures for promoting consumer education are being implemented under the scheme of the Consumer Basic Plan based on the Consumer Basic Act. The examples of measures regarding Education for Sustainable Consumption in the latest Consumer Basic Plan are the promotion of Eco-labels based on LCA (Life Cycle Assessment), providing consumers a database of Eco-labels on the website, providing Guidelines for Environmental Representations, and the support Program for NGO's activities on prevention of greenhouse effect.

### **7.4 Multi-stakeholder Forum on Social Responsibility for a Sustainable Future<sup>4</sup>**

In March 2009, business associations, consumer organisations, labor unions, the financial sector, NPOs/NGOs, and the Government jointly established the "Multi-stakeholder Forum on Social Responsibility for a Sustainable Future," as a new "public" framework (multi-stakeholder process) so that the wide range of actors collaborate with one another and solve the problems that cannot be solved by the Government alone.

#### **7.4.1 Purposes of the Forum**

In order to build a safe, secure, and sustainable society, it is necessary for various organisations and individuals in society to participate in the process to realise it and to play each role. However, none of these organisations or individuals play their roles in solitude or without cooperation. For example, eco-friendly production by a company is completed through the creativeness and endeavor of each employee, and therefore employers should facilitate a work environment in which everyone can

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<sup>4</sup> <http://sustainability.go.jp/forum/>

make the most of his ability with challenge and pride. But such productions are unsustainable if there are not consumers who are willing to buy the products or investors who supply money to the company. Moreover, the prerequisites of such consumption and investments are the proper disclosure of corporate or product information and also the innovative movements of civil society to popularise new lifestyles which harmonize with ecosystems. Therefore, it is an essential condition that stakeholders cooperate with each other to create an environment which facilitates their roles in the process of realising a sustainable society.

The creation of such environment is one of the main purposes of the Forum. That is, the Forum provides a new “public” framework (multi-stakeholder process) in which a wide range of stakeholders collaborate with each other to address the problems that cannot be solved by the Government alone. Specifically, representatives who are chosen by each stakeholder group through a transparent, open and fair process participate in the Forum, share information and recognition through dialogues and state their commitments for the collaborations. The output of the Forum is called the “Collaboration Strategy for a Sustainable Future” which is a general action plan of the stakeholders for collaborations on various social issues, and the Forum will monitor the progress of the action plan from a PDCA perspective and revise the Strategy periodically.

#### **7.4.2 Features of the Forum**

##### **(1) Joint Establishment**

The Forum is not the Government’s councils or committees. It is a completely new framework which was jointly established by business associations, consumer organisations, labor unions, the financial sector, NPO/NGO and the Government. The basic structure of the Forum was prepared by the preparatory committee which itself was a multi-stakeholder process with various stakeholder groups. The committee has drafted the statement and the memorandum of the Forum through active discussions among stakeholders since May 2008. And finally the top representatives of the stakeholders including the Prime Minister signed on the statement to establish the Forum in their joint names in March 2009.

##### **(2) Equal Partnership**

The concept of equal partnership is deeply incorporated in the design of Forum. For example, the function of what is called “secretariat,” which is usually carried on by the Government, is performed by the steering committee that consists of all stakeholder groups.

Moreover, agendas of the Forum are decided by the participants. In the Government's councils or committees, agendas are beforehand set by the Government. The only thing that commissioners of the councils or committees do is to discuss the given issues and to make policy proposals to the Government. Besides, the output of the councils or committees is the Government's policies such as tax, subsidies, or regulations. Stakeholders other than the Government are no more than the objects of such policies on which the proposals of the councils or committees aim to exercise an influence.

In contrast, agendas of the Forum are decided by the participants including the Government in equal status through months of open and fair discussions. Also the output of the Forum will be not only the Government's policies but also the actions of other stakeholders such as companies, consumers, investors, and civil organisations.

### **(3) Bottom-up Participation**

The Government's councils or committees typically consist of commissioners who are appointed by the Government as a personal expert. Therefore the commissioners have no direct relationship with citizens although some of them belong to specific interest groups.

The members of the Forum are chosen by each stakeholder group through a transparent, open and fair process. This means each group is supposed to form an independent network outside the Forum through which various organisations or individuals in the group discuss with each other and choose their own candidate. Moreover, the discussions among the members of the Forum are transmitted to these organisations or individuals through this network and cause further discussion inside the group. Through such an interactive and continuous process between the Forum and each stakeholder group, the discussions and commitments made by each group are expected to promote independent activities of various organisations or individuals in the group, and finally to change values and behaviours of people directly and indirectly connected to them.

#### **7.4.3 The Forum and Education for sustainable consumption**

The forum is now in the process of choosing agendas for the first Collaboration Strategy that is to be adopted by spring 2010. One of the strongest candidates of the agendas is education for sustainable consumption since almost all stakeholder groups including business associations, consumer organisations, the financial sector, NPOs/NGOs and the Government have made similar proposals simultaneously.

Moreover, the focus of the Forum is expected to be citizenship education for sustainable development, especially “consumer citizenship education.” Consumer citizenship, as a concept, originated in Canada in the 1980’s and was further developed in Australia, USA and Europe during the last decades.<sup>5</sup>

A consumer citizen is an individual who makes choices based on ethical, social, economic and ecological considerations. The consumer citizen actively contributes to the maintenance of just and sustainable development by caring and acting responsibly on family, national and global levels.<sup>6</sup>

And consumer citizenship education encompasses “attitudes, knowledge and skills connected to functioning in today’s society. It is responsibility learning which aims to contribute to the individual’s ability to manage his own life as well as participating in the stewardship of the global society’s collective life.”<sup>7</sup> It is a new interdisciplinary area of education integrating consumer education, environmental education and citizenship education, which have been developed mainly in European countries since the beginning of the millennium.

Consumer education in Japan has traditionally been a minor area of social education, the focus of which is mainly on giving information or skills to consumer that is needed to protect themselves in the markets. Although some descriptions concerning consumer education were added in the new curriculum guidelines adopted in 2007, schools and teachers lack the appropriate teaching and learning contents to form responsible consumers. Of course, it is unrealistic and not even desirable to introduce consumer citizenship education taught and learned in European countries as it is. Its concepts and practices are expected to bring new perspectives to Japanese consumer education and contribute to the creation of our own scheme of education for sustainable consumption.

The Forum will provide an overall platform on which not only schools and the Government but also companies, labor unions, financial institutions, consumer organisations, and NPOs/NGOs can cooperate with each other and play their own roles to support the process of building responsible consumers by society as a whole. Moreover, it is expected by many stakeholders to build some partnerships or collaborations between the Action Plan of ESD and the Forum’s Collaboration Strategy.

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<sup>5</sup> Thoresen (2005) pp.9

<sup>6</sup> Thoresen ed. (2005) pp.7

<sup>7</sup> Thoresen ed. (2005) pp.7



## CHAPTER EIGHT

### A NEW DIRECTION OF POLICY FOR ENVIRONMENTAL EDUCATION AND EDUCATION FOR SUSTAINABLE CONSUMPTION: IN A MIDDLE OF A DILEMMA BETWEEN QUALITY AND QUANTITY

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There are two major national policy frameworks in relation to recent movements on Education for Sustainable Consumption (ESC): Environmental Education Promotion Law (EEPL) and Education for Green Growth (EGG). Republic of Korea (ROK) enacted EEPL in February 2008 in order to fulfil sustainable development through a political framework of Environmental Education (EE) at a national level. In addition, the Cabinet Meeting of ROK confirmed the 30% target of the national green house gas emission by 2020 in November 2009 under the national vision of “Low-Carbon, Green Growth<sup>3</sup>”. This national project is strongly promoted and led by the Presidential Committee on Green Growth established in 2009 and instituted Education for Green Growth (EGG) to promote diverse educational programmes including Education for Sustainable Consumption (ESC) projects across the country. Both national frameworks, *i.e.* the national project “Low-Carbon, Green Growth” and EEPL, indicate a strong willingness of the government to support educational programmes for encouraging people to practice sustainable behaviours.

Nonetheless, there are still many obstacles associated with the present conditions of EEPL and ESC in the ROK. To address difficulties in EE and ESC implementation, this chapter explores the current national frameworks on EEPL and ESC in ROK and aims at providing policy recommendations for its future directions. For instance, section 8.1 starts with historical backgrounds of EE and EGG especially focusing on EEPL and ESC respectively. Section 8.2 explores current policy directions of EEPL and EGG. Then the types of challenges encountered in the implementation of EEPL and ESC policies are explored in Section 8.3. Finally, section 8.4 concludes with some recommendations on EE and ESC policy and implementations.

#### **8.1 Introduction: Historical Background of Environmental Education and Education for Sustainable Consumption**

The Environmental Education Promotion Law (EEPL) is a remarkable achievement after four decades of hard efforts on Environmental Education (EE) by various professionals such as lawmakers, legal experts and environmental civic groups. Whilst Education for Sustainable Consumption (ESC) has gained increasing interest by central and local governments because of the recent national movements on Education for Green Growth (EGG) as explained in the following.

##### **Environmental Education and EEPL**

The history of EE in ROK can be traced back to the early 1970s which was a background era for EE when people became aware of the concept (as shown in Table 8.1 below). The foundation of EE

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<sup>3</sup> [http://www.greengrowth.go.kr/english/en\\_about/en\\_introduction/introduction.cms](http://www.greengrowth.go.kr/english/en_about/en_introduction/introduction.cms)

policy was prepared during the 1980s to address rising environmental pollutions in consequent result of economic-centred growth. Nevertheless, there was no clear consensus towards EE policies at this point. Based on the groundbreaking works throughout the 1970s and the 1980s, substantial EE policies and implementation plans finally came to fruition in the 1990s (see Nam, 1995 for the categorised eras of EE development in ROK). In particular, EE action plans and policies in ROK have been critically influenced by international consensus since the 1990s such as the UN Conference on Environment and Development in 1992 in Rio de Janeiro and the UN Conference in Johannesburg, 2002 (see Table 1).

From the 1990s onwards, there are two noticeable EE policy directions in ROK. First, a simple concept applied in education about nature and its conservation has shifted into a participative concept of education for sustainable development for a quality of life through people's empowerment. In particular, the Agenda 21, action programmes for the 21<sup>st</sup> Century introduced in the UN World Conference in 1992, has been adopted in EE policies as a major principle for building a sustainable society. This EE policy orientation has been further strengthened since the ROK government supported the worldwide political consensus towards education for sustainable development through Agenda 21 at the World Summit on Sustainable Development in Johannesburg, 2002 (Korean Council for Local Agenda 21, 2002). Second, the other noticeable development of EE policy in ROK is that EE is more prevalent in the formal education sector than in the non-formal education sector. In other words, EE policy has been promoted by the government within the National Curriculum as an independent subject which is a unique approach to EE policy world-wide (Nam, 1995).

Despite significant development of EE over the last four decades, a proposal for the enactment of legislation was given little attention by the government until the early 2000s because of contrary interests between different governmental departments. A division of opinion towards the need of EEPL amongst the governmental departments, academic researchers and diverse NGOs was also a further obstacles to enact EE legislation. In fact, it took almost three decades to submit a draft of the EE Promotion Law to the National Assembly in 2007 for its enactment since it was first proposed by EE academic researchers in the EE Symposium in 1983. The submitted draft was possible because there was a consensus towards the urgent need for a law in spite of different interests crossing diverse governmental social groups. As a result, the EEPL was finally enacted in February in 2008.

#### **EGG<sup>4</sup> and ESC<sup>5</sup>**

Education for Green Growth (EGG) is promoted by diverse governmental and social sectors across ROK under the national project of "Low-Carbon, Green Growth" since its announcement in August 15, 2008 as a national vision through:

- Education for a green lifestyle which is integrated with both economic growth and environmental conservation;
- Orientation for capacity development and improvement of professional knowledge in future green technology and industry, and;
- Leadership education to secure a national position leading green growth in the international society.

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<sup>4</sup> Based on: [http://www.gji.re.kr/xe/board\\_green\\_pds/4486/page/2](http://www.gji.re.kr/xe/board_green_pds/4486/page/2), and; <http://www.greengrowth.go.kr/www/policy/strategy/strategy.cms>

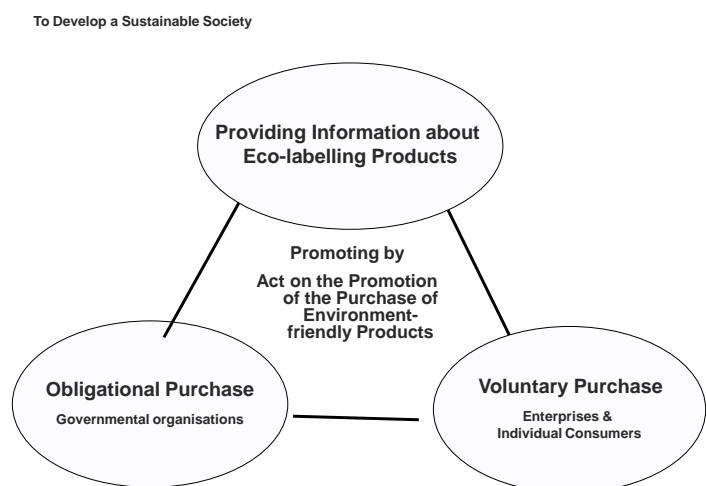
<sup>5</sup> Based on: <http://www.koeco.or.kr/>, and; <http://www.cacpk.org/>.

The critical need of EGG was emphasised in the first meeting of the Presidential Committee on Green Growth in February 2009 by the President Myung-Bak Lee in order to let the people:

- Fully understand what Green Growth is and why we need it;
- Practice from feasible actions first in daily lives;
- Prepare for a Green Growth society coming up in the near future, and;
- Take an equal status as one of major countries world-wide in addressing global issues including Climate Change in order to respond to international requests for UN Decade of Education for Sustainable Development and others including OECD, APEC, and ASEAN+3.

There are three objectives of the Green Growth policy: 1) mitigation of climate change and energy independence, 2) creating new engines for economic growth, and 3) improvement in quality of life and enhanced in international standing. EGG has been promoted to support the third Green Growth policy, especially to change individuals' awareness towards green lifestyles and their actual sustainable practice. EGG 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 to individuals to reduce greenhouse gas emissions. However, EGG is still at the beginning of its development. In addition, civic organisations and governmental institutes such as Consumers Korea and Korea Environmental Industry & Technology Institute (KEITI) have taken significant roles in ESC across the country. Consumers Korea is one of powerful civic organisations which have a long history of enlightenment targeting the public for sustainable consumption lifestyles in ROK since the 1980s. Regarding ESC, Consumers Korea organised a series of ESC programmes and actively engage in policy decision-making processes. For instance, Consumers Korea submitted an official letter to the Ministry of Education, Science and Technology (MEST) to request for the provision of ESC guidelines in the national curriculum. Consumers Korea also requested UNEP and UN-DESA to adopt ESC guideline for the UN 10-Year-Programme for sustainable consumption and production in cooperation with Consumers International. Noticeably, Consumers Korea's current movements on ESC have focused mainly on providing information on energy saving action, food safety and eco-products more than how consumers do actual practice. In comparison with Consumer Korea targeting the general citizens, KEITI which was renamed from Korea Eco-Product Institute in 2009 has led the Eco-labelling Programme in order to provide consumers accurate information and a wide range of purchasing opportunities by encouraging companies to produce environmentally-friendly products in good quality with cheaper prices as shown in Figure 8.1.

**Figure 8.1: Promotion Strategy of Purchasing Eco-Products**



**Table 8.1: Key Events in Environmental Education and Education for Sustainable Consumption in Republic of Korea and in Elsewhere**

Year	In Republic of Korea	In Elsewhere
1931		Enactment of National Parks Law, Japan
1950		Establishment of National Park Association of Japan
1951		Establishment of Nature Conservation Society of Japan
1957		Enactment of Nature Parks Law, Japan
1963	Legislated Pollution Protection Act	
1964		Establishment of Primary and Middle School Teachers' Pollution Control Measures Study Association, Japan
1967		Enactment of "Basic Law for Environmental Pollution Control", Japan
1970		Legislated EE Act, United States
1971		Partial Revision of Primary and Middle School Education Guidelines
1971		Establishment of the Environment Agency
1972		The UN Conference on the Human Environment, Stockholm, <i>Declaration on the Human Environment</i>
1972		Enactment of Nature Conservation Law, Japan
1973		Decision by Cabinet on Basic Policy on Conservation on the National Environment, Japan
1973		Establishment of "Environmental Week", Japan
1974	KEDI first introduced the term EE.	
1975	First non-governmental environmental organisation – the Korean Environment Protection Association.	UNEP/IEEP founded an International Workshop at Belgrade, <i>The Belgrade Charter</i> published.
1977	Legislated Environment Conservation Act	Establishment of Japan Environment Association
1977		The first Intergovernmental Conference held at, Tbilisi, Georgia, USSR, <i>Tbilisi Declaration</i> published.
1979		Regional Meeting of Environmental Education for Latin America in San Jose, Costa Rica
1980	Founded the Environmental Protection Agency	IUCN/UNEP published <i>The World Conservation Strategy</i> , sponsored by WWF.
1981	Legislated article of Environmental Right	
1981	Concept of EE was reflected in the Fourth National Curriculum for the first time.	The National Environment Policy Law 6938 in August, Brazil
1983	First symposium introducing the EE Act in the State and proposing the EE Promotion Law	
1985		World Environmental Education Conference held in Tokyo
1986		Issuance of Long-term Environment Conservation Plan by Environment Agency, Japan
1987		International Congress on EE and Training, Moscow, USSR/WCECED published <i>Our Common Future</i> (known as the <i>Brundtland Report</i> )
1988		Publication of a report by Environmental Education Council under Environmental Agency, Japan

1989	Revision of a School Education Guideline, Japan	
1990	Revised EE Act, United States	
1991	Establishment of the Japanese Society of Environmental Education	
1992	<i>Caring for the Earth: A Strategy for Sustainable Living</i> published. UN Conference on Environment and Development at Rio de Janeiro, Brazil, <i>The Earth Summit</i> published.	
1993	Promulgation and Enforcement of the Basic Environment Law, Japan	
1997	Environmental Science as is re-titled Ecology and Environment and the concept of EE reinforced within the Seventh National Curriculum.	
1998	Setting of the "Period for integrated studies" into school curriculum	
1999	National Law No. 9795 for the national EE policy in April, Brazil	
2001	Publication of a report entitled "Environmental Education and Studies in the Future: Aiming at the Sustainable Society" by the Central Environmental Council, Japan Revised EE Act, United States Instigated discussions about the need for the Law for environmental conservation and the promotion of EE, Japan	
2002	Forum to propose EE Promotion Law to the National Assembly Preparatory Committee IV for WSSD, Indonesia/ UN Conference at Johannesburg, South Africa, Political Declaration announced for Sustainable Development.	
2003	The United Nations General Assembly proclaimed the UN DESD (2005-2014)	
2004	Enacted 'Law for Enhancing Motivation for Environmental Conservation and Promoting of EE', Japan Established an actual implementation plan of 'Law for Enhancing Motivation for Environmental Conservation and Promoting of EE', Japan Establishment of a NPO "ESD-J (Education for Sustainable Development)-Japan"	
2005	Forum to enact EE Promotion Law in the National Assembly	
2006	Issuance of the "Japan's Action Plan for UN Decade of Education for Sustainable Development (DESD)" by the national government. Establishment of a "Inter-ministerial/Agencies Meeting for DESD"	
2007	Proposed a draft of EE Promotion Law to the National Assembly in March	
2008	Legislation and Judiciary Committee in the National Assembly, voted for EE Promotion Law in February	
2009	Establishment of EE Promotion Law, The Basic Law on Low-Carbon and Green Growth	

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EE: Environmental Education/ IUCN: International Unions for the Conservation of Nature and Natural Resources/ KEDI: Korean Education Development Institute/ UN: United Nations/ UNEP: United Nations Environment Programme/ WWF: World Wildlife Fund/ WSSD: World Summit on Sustainable Development/ DESD Decade of Education for Sustainable Development

KEITI organised a series of educational programmes targeting industry staffs and the central/local governmental agency officers to change their awareness towards eco-labelling products. KEITI also became increasingly aware of the importance of public-service advertisement about eco-labelling items and their information on TV and has sponsored it since 2006 up to present. Not overlooking the remarkable achievements on green product policy, KEITI still has challenges centred on the issues of companies and consumers' green purchases as follows:

- Building up the Green Product Network for the regional actions for sustainable consumption;
- Supporting the green consumer initiatives;
- Providing feasible and concrete action plans to both companies and consumers.

KEITI has recently strengthened educational programmes for both current and future industry leaders especially in cooperation with EGG because of the government's strong willingness to implement the national project "Low-Carbon, Green Growth". However, likewise EGG, ESC as led by Consumers Korea and KEITI is still at the beginning of its development.

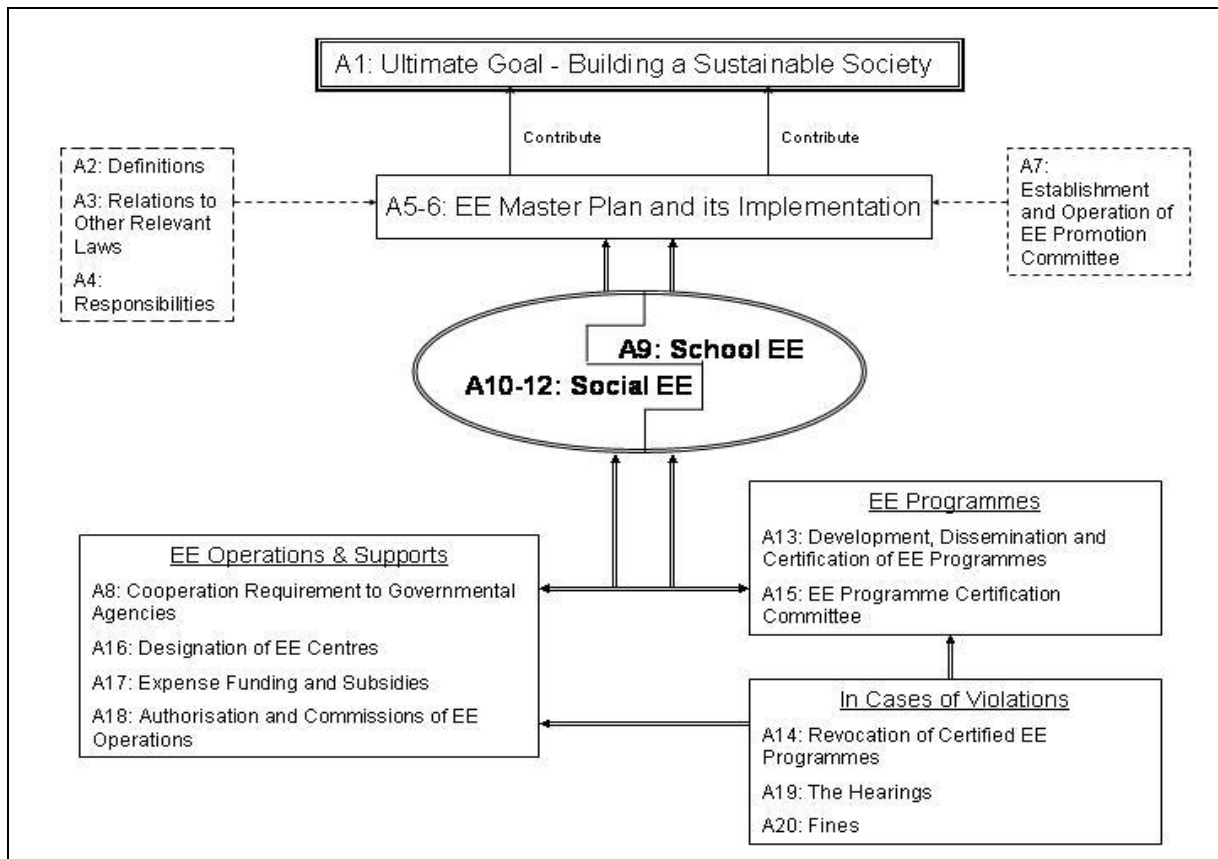
## **8.2 A Shift of New Policy Directions for a Low-Carbon Society through Green Growth**

It is necessary to look over the policy directions of EEPL as ESC is acknowledged as a part of EE in ROK. EEPL ultimately aims at contributing to the nation's and local community's sustainable development within the balance between nature and human beings (see Figure 8.2 below). EEPL has not strongly included the concept of "low-carbon, green growth", but it rather stresses the need of ESD and provides implementation guidelines.

It is noticeable that the structure of the EEPL indicates the shifting of the two new policy directions of the government. First, the EEPL shows a strong will of the central government to promote EE through legislative formulation within a well-built framework (stated in Articles 5-6). Whilst there has been a lack of an established EE policy within a long term blue print by a law, the EEPL states that the Ministry of Environment should make the EE master plan in cooperation with the Ministry of Education & Human Resources and the Ministry of Maritime Affairs & Fisheries every five years. Under this national EE master plan, each provincial governor across the country should provide a local EE plan every five years in consideration of regional conditions.

Second, the law devotes over one third of the articles to promoting social EE. Upon reflection of the historical development of EE in ROK which has underwent great development along with the National Curriculum, this new orientation of the law toward social EE indicates the government's determination to now consider both formal and in/non-formal sectors in promotion and implementation of education for sustainable development. Until now the government has drawn little attention to social EE in comparison to school-based EE, although EE in non-school sectors has made great quantitative advances since the 2000s (see Table 8.3 for the rapid growth of environmental NGOs).

**Figure 8.2: Contents of EE Promotion Law in Republic of Korea**



A: Article of EE Promotion Law; EE: Environmental Education

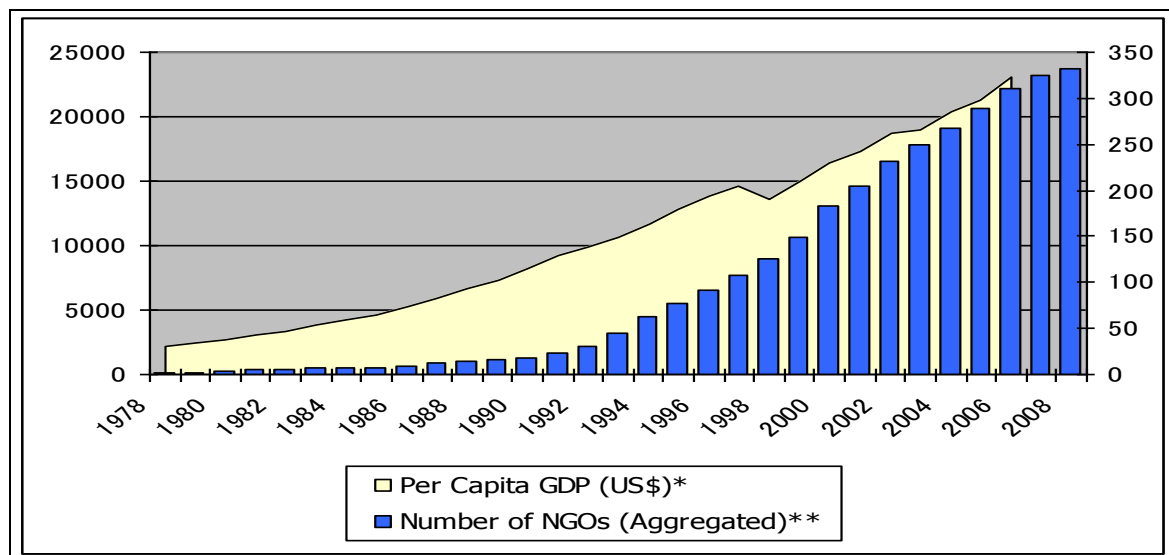
As explained earlier above, ESC which is acknowledged as a part of ESD has not received different recommendations from policy directions of EEPL. In fact, there is no emphasis on ESC within EEPL, and it is broadly defined within a concept of ESD. Therefore, policy directions of ESC can rather be found in EGG under the Green Growth policy which has dominantly been promoted across the country (see Section 8.1 for the major policy objectives and their directions). EGG is also expected to be strengthened further in consideration of the recent establishment of the Basic Law for Low-Carbon, Green Growth in January 2010.

Noticeably, policy directions of EE and EGG in relation to ESC highly indicate the government's new policy towards upgrading quality and standardisation at a national level. There are two major rationales behind this governmental direction. One is the concern about the public's qualitative improvement of life across governmental sector, the academic researchers and practitioners in the NGOs in spite of in-school EE and social EE having rapidly grown quantitatively over the last two decades. In particular, fragmented training institutes without any verification system are one obstacle to improving the quality of education guides for social EE programmes as highlighted in EEPL. Likewise, ESC does not have a clear verification system or guidelines yet. In reflection on this fact, seven out of twenty Articles of the EEPL emphasise not only formulating certifications for EE programmes and institutes/centres but also penalties in cases of violation. The other rationale is the high public expectation towards a good quality of life along with sustainable economic growth as shown in Green Growth policy. As one of the indicators, the numbers of environmental NGOs

authorised by the Ministry of Environment were 330 in the year 2008 whilst there was only one in 1978. As shown in this increased statistical evidence, the public have become increasingly aware of the importance of engagement in civic organisations to reflect their interests on relevant policies especially in relation to eco-products and food safety matters. Therefore, it became necessary for the government to respond to the public's request for improving quality of life through diverse approaches.

Overall, ESC has been promoted by the central government in ROK within both EEPL which is a national law established based on a long developmental history of EE and through EGG which is dominantly promoted under the recent national policy direction for Low-Carbon, Green Growth. However, ESC is still in its infancy stage as it still has deficits in its educational contents in ROK. ESC also has difficulties in qualitative development in comparison with both quantitative growths of EE and recent promotions of EGG. The new policy directions of EE and EGG therefore indicate the government's strong willingness to upgrade quality and standardisation.

**Figure 8.3: Growth of NGOs and GDP in Republic of Korea**



Per Capita GDP\*: based on OECD, 2008; Number of NGOs (Aggregated)\*\*: Based on the Ministry of Environment's Archive, 2008.

### 8.3 Challenges in Implementations of the Environmental Education and Sustainable Consumption

The enactment of the Environmental Education Promotion Law (EEPL) is a landmark in the developmental history of EE in Korea. Within a strong legislative measure, EE can be strengthened and revitalised. In particular, EEPL is expected to provide an opportunity for social EE, which lags behind the development of school EE, to take off from its currently state due to the new certification system. In this regards, ESC as a part of EE is expected to be facilitated more than before in social sectors as it has also lagged behind in its development in governmental, formal education and industry sectors. Nevertheless, EE and ESC are still confronted with some issues in actual implementation as follows (also discussed in the Forum on Enacting Regulations of Environmental Education Promotion Law on the 23<sup>rd</sup> July 2008; see the International Environmental Education Institute, 2008).



First, it is about what kinds of actual impacts the certificate system can bring to EE including ESC promotion. Ironically, there is a high possibility that social EE could be made weaker and non-adaptable because of the stringency of the new legislative control. A reality of social EE in the ROK is that it is still not strong enough to meet the standards proposed by the EEPL because of insufficient financial support and lack of human resources. Therefore, many numbers of grassroots environmental activities and EE centres across the country which have contributed to social EE development in ROK could decline under this stringent control. Therefore a critical issue about how we can encourage existing and local EE/ESC experts, centres, institutions and organisations to adjust to the new legislative framework should be raised.

The second issue is how to address a balance between school EE and social EE. In comparison with the social EE, the EEPL does not propose clear orientation for school EE. EE has been significantly developed along with the National Curriculum in ROK. Therefore ESC within the formal education system is critical when we consider that it is still in its infancy stage. In addition, there are still critical weaknesses in relation to development of teaching materials, a lack of collaboration between schools and environmental NGOs, and the need of in-service training courses for school teachers. In fact, the position of the independent subjects 'Environment' and 'Ecology and Environment' within the National Curriculum are still not strong due to students' low choice as it is an optional subject. Furthermore, school governors and teachers' high concerns about legal responsibilities for students' safety during field trips which are major activities of EE programmes is one obstacles in a real teaching world. As ESC needs to be developed further within school EE, these kinds of facts are urgent challenges.

The final question is about how we can avoid negative impacts of the EEPL in relation to upgrading quality and standardisation of EE. For instance, there may be a high possibility of an excessive issue of EE certifications, especially in relation to the social EE guide qualification system. This eventuality may lead merely to quantitative growth of EE which is against the intention of the EEPL for providing high quality EE to students and people. Then there is still a remaining question about how we can manage and judge the quality of EE programmes, training courses and designated EE centres/institutes. This is a critical concern for ESC when we consider its vulnerable position within EE policy and curriculum.

Without addressing the issues above as priority requirements prior to the actual enactment of the EEPL, the new legislative format and other national policy such as EGG and Eco-Product Programme within the Basic Law on Low-Carbon and Green Growth may not be effective but instead result in a widespread confusion because of the current difficulties and deficits in school EE and social EE in ROK.

#### **8.4 Conclusions**

Overall, Environmental Education (EE) and Education for Sustainable Consumption (ESC) has been developed within formal sectors. In particular, ESC has been promoted in governmental and industry sectors more than social sectors. Regardless of the government's recent strong willingness to achieve low-carbon, green growth and the public's increased interests in eco-products, ESC is still at a beginning era not only in the formal sector but also in the social sector because of the low quality of contents in comparison with its quantitative expansion. Therefore recent policy directions under

Environmental Education Promotion Law and the Basic Law on Low-Carbon & Green Growth are significant for future development of EE and ESC although many challenges still remain: 1) to strengthen social education 2) to make balanced development between formal education and in-/non-formal education sectors 3) to upgrade quality and standardisation. In particular, governmental support for ESC activities led by consumer citizen organisations is critical in order to strengthen the public's awareness and sustainable consumption lifestyles. It is time to utilise civic organisations' empowerment in ESC when their critical roles in social education are considered.

**CHAPTER NINE**  
**THE SUSTAINABLE CONSUMPTION OF GREEN SCHOOLS IN CHINA**  
**A CASE STUDY ON THE CAMPUS ENVIRONMENTAL MANAGEMENT PROJECT IN GREEN SCHOOL**

*Ms. Yang Ke<sup>1</sup>*

### **9.1 Sustainable Consumption and School Education**

Sustainable Consumption has its origins from the Earth Summit held in Rio de Janeiro in 1992. In *Agenda 21* which was passed at the Earth Summit, it came into a consensus that the main reason for the continuous environmental degradation worldwide is the unsustainable pattern of consumption and production. And it was proposed that all countries should promote the construction of sustainable consumption practices.

Many meetings and seminars have been held on sustainable consumption, including the Symposium on Sustainable Consumption in Oslo, Norway in 1994 and the Workshop on Policy Measures for Changing Consumption Patterns in Seoul, Korea in 1995. In 2006, MEP China and UNEP held the “China Sustainable Production and Consumption Round Table”. All the above meetings and seminars promoted indepth discussion on the basic theory, policy and measures of sustainable consumption. This was done with a specific focus on enhancing the public awareness of this issue. Sustainable consumption has become an important part of the strategy to implement sustainable development for many countries including China.

Sustainable consumption is complex, and its definition is difficult to pin down. According to the concept of UNEP’s Youth X Change Project, sustainable consumption (SC) is about finding workable solutions to imbalances – social and environmental – through more responsible behaviors from everyone. In particular, SC is linked to production and distribution, use and disposal of products and services with the main objective of providing the means to rethink their lifecycle. The aim is to ensure that the basic needs of the entire global community are met, excess is reduced and environmental damage is avoided.<sup>2</sup> The concept of Sustainable Consumption includes satisfying human needs; favoring a good quality of life through decent standards of living; sharing resources between rich and poor; acting with concern for future generations; looking at the ‘cradle-to-grave’ impact when consuming; minimizing resource use, waste and pollution.

The new concepts and strategies of development set forward by the Chinese government in recent years are aimed at changing the development pattern and achieving green development. The basic goals of this process are to phase out the old production and consumption systems which are highly

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<sup>1</sup> *Center for Environmental Education and Communications, Ministry of Environmental Protection*

<sup>2</sup> <http://www.youthxchange.net/main/introducingustain.asp>

resource consuming and polluting, and at the same time gradually form energy-saving and environmental friendly systems. A number of specific measures have already been taken to foster and strengthen a new development pattern.

Low-carbon economy is one of the important elements in this change. Low carbon economy is the direction of the sustainable development now and in the future, and is the fundamental way to reduce green house gas emission and ease climate change. Drawing upon other countries' experiences, China is now actively carrying out research on policies and technologies about low carbon economy in a bid to find a low-carbon economic development strategy suited to China's needs.<sup>3</sup>

Under this social atmosphere, education for sustainable consumption is an important part for constructing energy-saving and environmental-friendly systems in China. Young people are an important target group on the demand-side in this consumer society and play a determinant role in future consumption patterns.

This paper focuses on how to implement education for sustainable consumption to young people, especially at the school level, and it uses the campus environmental management project as a case to analyse and discuss this issue.

## **9.2 The Background and Significance of the Practice of Energy-Saving and Pollutants Emission Reduction in School Campus**

In the period of "the Eleventh Five-Year", the Chinese economy continues to develop rapidly, the resources and energy consumption continues to increase, and the pressure that environmental protection faces is getting harder. Environmental issues have obtained more and more attention in China, including how to alleviate the pressure of population on natural resources, and how to realise economic development that coordinates comprehensively with the sustainable development which has become the key issue of the social development.

In October, 2005, the 16th Fifth Plenary Session of the Communist Party of China proposed in "The Suggestion on Formulating the 11th Five Year Plan of National Economy and Social Development of the Central Committee of the CCP" that it must persist on taking a scientific development concept to guide the overall situation of economic and social development. It was proposed to summon that great efforts should be made to construct resource-saving and environmental-friendly society (namely the "two-oriented societies"). Constructing resource-saving and environmental-friendly society are the important aims of economic long-term development in Chinese society, which conforms to the Chinese national condition and the need for development. The

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<sup>3</sup> Li Gangjie's presentation at CCICED Round Table, April 16, 2009

environmental-friendly society is to adopt the ways of production, the life style and the sustainable consumption which is advantageous to environmental protection in the entire society to establish the positive and interactive relations between humanity and the environment. Vice versa, the good environment can also promote the production, improve the life, and achieve the harmony between humanity and nature.

Under such background, the green school construction holds a special significance and function. The green school is not only consistent with the foundation direction of the resource-saving and environmental-friendly society, moreover it is practicing the scientific development concept in a broader scope, not only by distributing the concept and information of sustainable development, but also by giving vivid examples of how to integrate these concept in school and personal life. Therefore, in December, 2005, in "the Decision on Implementing the Science Development Concept and Strengthen the Environmental protection of the State Council" promulgated by the State Council, it proposed clearly and specifically the requirement to promote the environmental education at the foundation level like green school and so on, which have provided specific and appropriate policy guarantees for the green school development.

Environmental Education is one of the necessary and effective ways to realise environmental protection and sustainable development. The construction of "The Green School" is based on the context of sustainable development and focusing on campus environmental management as the means employs the following principles: to make full use of all education resources inside and outside school; to implement Environmental Education effectively; and, to guide teachers and students to participate in constructing a campus environment which conforms to resource-saving and environmental-friendly features. This serves the main purpose of constructing the school into an educational institute which fosters and enhances achievements towards an ecological civilisation by the teachers, students and staff of the school and also supports the surrounding communities. From the angle of education, Environmental Education should foster student's comprehensive ideation and problem solving ability, their understanding of nature, society, economy and culture, as well as their interaction from an integrative view. This allows the students to learn how to solve environmental problems through positive participation in practical activities. Under the present situation in China, it is also important for the environmental educator to foster good conduct and behaviour by advocating the saving and caring for the environment from childhood. The main goal of a realised change in behaviour patterns is for the student to become a high-quality and talented person with well-round development. From the angle of sustainable consumption, the school as a material and energy consumption system can set an example as an experimental plot for sustainable consumption, resource saving, low-energy consumption and the improvement of the campus environment in the school, thus providing a specific social demonstration of these sustainable development principles.

In February, 2003, the Ministry of Education promulgated "The Topic Outline of Environmental Education of Elementary and Secondary school students", and promulgated "The Environment

Education Implementation Guide in Elementary and Middle schools" in November of the same year, which both clearly determine the requirement to integrate Environmental Education in each discipline's curriculum for both the elementary and middle schools. On January 27th, 2006, the Ministry of Education proposed the requirement to make great effort to construct energy and resource saving schools at all levels and for all schools across the country. This pointed out explicitly that the construction these saving-type schools should address as a key point the resource utilisation of energy-saving, water saving, wood saving, land saving comprehensively. This should aim to strengthen the use and management of public places for the conservation of water, electricity, gas within the classroom, laboratory, canteen, dormitory and so on, and this should implement a clear savings target into the school evaluation system. These requirements have already been practically implemented in the green school practice and the evaluation systems. The saving-type schools will certainly become an indispensable constituent in the process of the foundation and development of the green school.

In 2002, the Center for Environmental Education and Communications organised the translation of the *Guidebook for Youth Xchange – Training Kit on Responsible Consumption*. This guidebook has now been sent to all the national awarded green schools and green communities. Millions of people are now aware the concept of sustainable consumption.

### **9.3 Case Study of the Campus Environmental Management Project**

#### **9.3.1 Introduction of the project**

The campus environmental management project is an important content of the Green School programme in China. This project was first introduced to China by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) in 2003, with the cooperation of the Center for Education and Communication, Ministry of Environmental Protection. This project introduced and promoted the environmental management system into schools along with methods which were suitable for the small and medium-sized enterprises. This identified a set of methods for good campus environmental management. It established "keeping schools in an environmental friendly way" as the primary goal, and has provided effective methods for resource and energy saving and pollution prevention for schools. It initiated the school to take the effective action, enhance the management benefit, use environmental friendly products, reduce the cost, reduce the environmental pollution, and improve the campus environment and security conditions.

From 2003 until now, there have been more than 230 schools from 29 provinces all over China who participated in this project. CEEC held training workshops for schools. Representatives from schools learned how to incorporate the methods into the actual campus management. According to the reports from schools on the project, obvious effects had been obtained. By taking the systematical methods of environmental management and practical measures, the consumption of resources and

energy (such as water, electricity, paper) were effectively reduced by the schools. The pilot schools not only improved their environmental performance, but they also gained educational and economic benefits at the same time. The environmental awareness and participation ability of the teachers and students were improved greatly during the project implementation process. This led to the realisation of the goal of the project: to achieve triple-win – economical, environmental and educational.

The practice of this project demonstrated that implementing the campus environmental management, which is systematic and scientific, conforms to the era requirement. Promoting and popularising the campus environmental management project in the green school is the specific manifest of the green school to establish the social requirement of resource-saving and environmental-friendly society proposed by the Central Party Committee and the State Council. It is also an obligation of the green school to realise the science development view, which is obtained through the construction of saving-type campuses.

### **9.3.2 The theoretical basis of the campus energy-saving and emission reduction practices – campus environmental management**

The campus energy-saving and emission reduction could be carried out through a variety of ways and methods, but schools that carry out the energy-saving and emission reduction practices in accordance with the theory and methodology of the environment management system should obtain quite positive outcomes. Under campus environmental management, efforts should be made to control the using, reusing and recycling of resources and energy effectively in the school and to improve the campus environment quality. This should aim to enhance the efficiency of the resources and energy and to improve the environmental awareness of teachers and students through administrative, educational, technical and economic mechanisms.

In this set of methods, the school takes the “non-production output” as the core around the input and output of material and energy in various activities of the campus. The methods are used to analyse the school’s present situation of resource consumptions, then formulate and implement a series of environment management measures which are suitable for the school and easy to work. Further efforts establish a set of continuous improvement mechanism, and integrate these into the conventional operation of the school, thus realising the comprehensive benefits in the aspects of economy, environment and education.

#### **(1) The aims of Campus environmental management**

Through comprehensive implementation of the environment management method in the campus, four main aims are achieved:

- Firstly, reducing use, reusing, and recycling energy and resources;
- Secondly, reducing the environmental footprint caused by solid waste, waste water and air pollutant discharge as well as deleterious substances;
- Thirdly, improving work and the living environment of the campus, and strengthening the campus safety management;
- Fourthly, improving the administration work of the school.

## **(2) The features of the campus environmental management**

In support of campus environmental, a series of practical energy-saving and emission reduction measures for the administrative personnel and other relevant personnel of the school were recommended. These contained the following features:

At first, this is a set of convenient environment management tools that are easy to understand and easy to learn. Even for the school superintendent whose routine work is extremely busy, it is easy to grasp these methods very quickly and put it into practice. Next, the cost of the methods recommended by this set of management tools is low, while the benefit is remarkable. Thirdly, the school may use this set of methods to form a set of continuous improvement mechanisms and to lay a good foundation for establishing a more perfect environment management system. More important is that, this set of methods emphasises the participation of all the staffs, and it requires the school to become “the experimental plot” of energy-saving and emissions reduction. This lets all the teachers and students improve the campus environment with their own wisdom and efforts in the practice of participation, and this is an effective process of higher quality education in itself.

### **9.3.3 The benefit of campus environmental management**

The school that develops the energy-saving and emissions reduction practices through the campus environment management tools may obtain the various benefits.

The first benefit is the environmental benefit: The school introduces the campus environment management tool engages in the reduction of environmental pollution, the consumption of resources and energy reasonably, the improvement of the work and study environment for teachers and students, strengthening the environmental awareness of teachers and students, and enhancing the comprehensive quality of teachers, students and staff.

The second benefit is the economic benefit: With the aid of practical campus environmental management, the school can obtain the economic benefit. The optimisation of resources, energy input and the reduction of waste emissions may lead to a reduction in costs and overhead and effectively save the educational expenditure.

The third benefit is the educational benefit: Introducing the campus environment management tool can promote the establishment of communication exchange mechanisms among various



departments of the school and make the responsibility and division of works clear to all levels of administrative personnel in the school, thus improving the administrators' environmental awareness in school. The teachers and students can participate in the campus environmental management together in order to: study the systematic campus environmental management method; demonstrate their creativities and practical abilities; examine the effects practice of these actions through learning and research; experience the strategic process first hand; and, gain a sense of achievement for the campus environmental improvements.

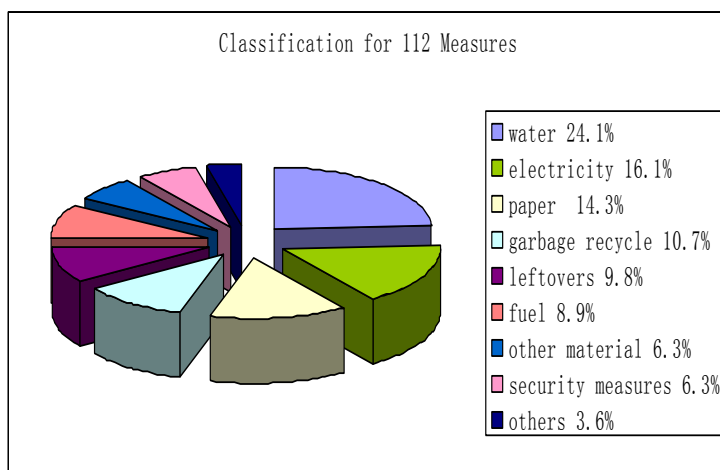
Except the above economic benefit, the environment benefit, administration benefit and education benefit can all lead to improvements in the work health safety conditions of the school and also further strengthen the teachers' abilities in environmental education and education for sustainable development. It can also improve the sense of accomplishment for the teachers, students and staffs in implementing the project.

#### **9.3.4 The environmental and economic benefits of campus environmental management**

A statistical analysis was conducted based on the implementation report of 70 pilot schools who participated in the campus environmental management project since 2006 and had provided effective data. It was discovered that in 2006 the project pilot schools had altogether proposed 112 measures, in which 78 measures have the explicit data record (as shown in Figure 9.1). The measures proposed by the schools, mainly involved water saving, electricity saving, the reduction of paper quantity, trash recycling, reduction of canteen leftovers, and fuel saving. The measures of water saving, electricity saving and the reduction of paper quantity account for 54% of the total. The first year of implementing the project resulted in a total savings more than 1,100,000 Yuan (the saving amount of each item is shown in Figure 9.2).

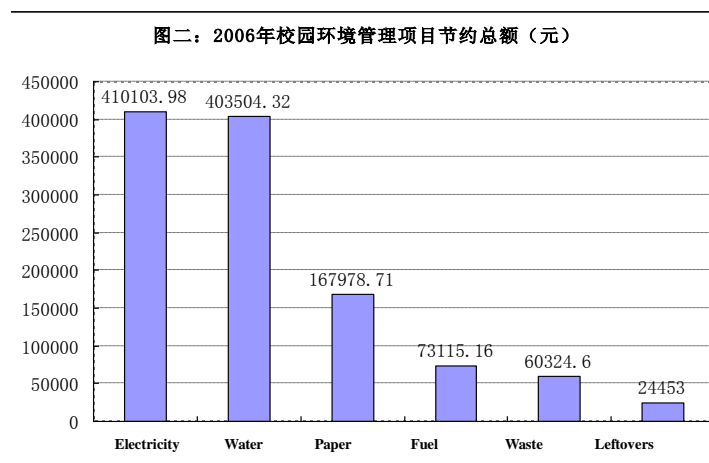
From the view of the amount of investment for implementing the campus management project in the pilot schools (as shown in Figure 9.3), 45% of the measures did not require any investment, while 24% of the measures required an amount of investment smaller than 2,000 Yuan. Adding these two items together accounts for 69% of the total number of measures. A total of 13% of the measures required investment higher than 10,000 Yuan. These higher investment measures occurred in cases where the school completed comprehensive analysis of the various aspects and benefits of optional measures across the sectors of the economy, the environment, the administration, the security health and the education. In these cases, although the investment is relatively large, the results and effects which they obtained were also very substantial. Therefore in the aspect of fund investment in measure implementation, the school usually considers input and output benefit, combined with the actual situation of the school. From the view of the payoff period of investment, in 78 measures, the measures which are effective immediately and are effective within a semester account for 71%.

At present, China is in the important stage of rapid development in industrialisation and urbanization. This has led to a situation where the consumption intensity of the energy and resources is high, and the situation of environmental protection is severe. Thus, the realisation of energy-saving and emissions reduction measures is the important task for environmental protection work in China. The potential role of young people in a transition towards sustainable consumption lifestyles is substantial and wide-ranging. The promotion of the campus environmental management project allows the green schools to continuously enhance their resource-saving and environment management level, and at the same time practically contributes strength to the current energy-saving and emissions reduction work in China. This also provides practical methods for the schools to respond to the requirement of the Ministry of Education to construct the saving-type campuses and for the schools to become “the experimental plots” of energy-saving and emissions reduction. Green schools have become a model for young people to see, to think and to practice sustainable consumption.



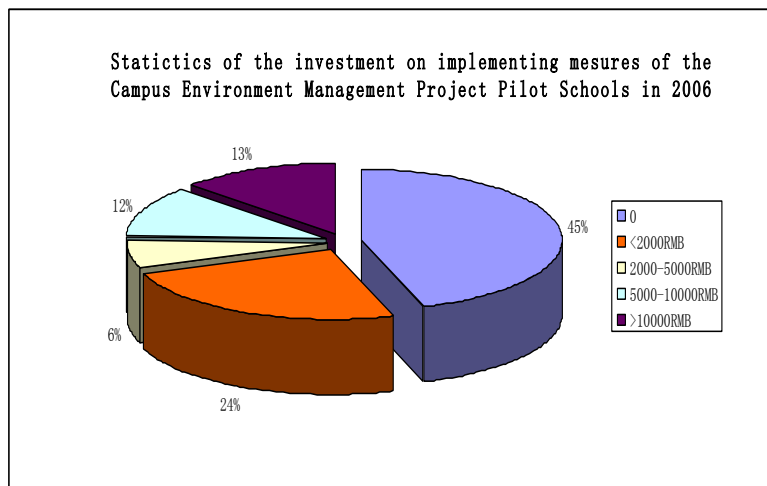
**FIGURE 9.1 – CLASSIFICATION FOR 112 MEASURES**

School Implementation measures (112) classification statistical figure in school of Campus environmental management project in 2006: water saving 24%, electricity saving 16%, the reduction of paper quantity 14%, trash recycling 11%, reduction of the canteen leftovers 10%, the materials saving 6%, energy saving 9%, strengthen safety measures 6%, others 4%



**FIGURE 9.2 – FINANCIAL BENEFITS (RMB) OF THE 78 PROJECT SCHOOLS IN 2006**

The amount of financial savings for campus environmental management project in 2006: water saving, electricity saving, paper saving, fuel saving, reduction of the leftovers, trash classification.



**FIGURE 9.3 – INVESTMENT IN CAMPUS ENVIRONMENTAL MANAGEMENT**

The statistics of amount of investment of school implementation measures (78) within the campus environmental management project in 2006: Over five thousand RMB (24%), one thousand to five thousand (12%), below one thousand (19%), does not need to invest (45%).

## 9.4 Consumer Education Projects

### 9.4.1 Distribution of Youth X Change Guidebook

In 2005, CEEC organised the translation of the English Guidebook of UNESCO's Youth XChange Programme. This is a guidance manual to help young people to build sustainable lifestyles and develop responsible consuming behaviour.

This book has now been distributed to all of the national award green schools (705) and green communities (236), with more than one million people receiving the information about sustainable consumption.

Based on the knowledge of sustainable consumption, many green schools and green communities have carried out various activities on reduction of consumption and recycling, such as using cotton tissue instead of paper tissue in kindgartens, recycling in schools and refusing plastic bags in communities.

### 9.4.2 LOHAS for Youth

In 2009, CEEC put an article about LOHAS in the *Green Future*, a magazine for green schools. The aim of the article was to raise students' awareness on how to have a sustainable lifestyle which is modern and environmentally friendly. A discussion about LOHAS was carried out in many green schools, and some students provided their opinions on this issue. From the discussions, young people have a stronger understanding on sustainable consumption and have found that environmentally friendly lifestyles can be fun.

### 9.4.3 Recycling of Textbooks in Schools

Since 2008, the Ministry of Education has encouraged schools to recycle their textbooks, which means that schools will give all students textbooks while in school and that these textbooks can be

reused year after year. Students will not buy the textbooks themselves.

This campaign has been implemented in many regions supported by local education agencies although there are some questions on this campaign. But it has become a popular project in green schools.

#### **9.4.4 Public Projects on Sustainable Consumption**

Residents are also encouraged to pay attention to sustainable consumption. In the COOL CHINA PROJECT, a project for green communities, leaflets and guidebooks were given to residents of the communities with tips on how to reduce, reuse and recycle to have a low carbon lifestyle. Information on the benefits of the new lifestyle is also given in the guidebooks. Many residents recorded their practice to reduce, reuse and recycling and monitor the amount of carbon emission they have helped to reduce.

### **9.5 Suggestions on the Promotion of the Education for Sustainable Consumption**

Sustainable production and consumption are important mechanisms to implement sustainable development. Consumption behaviours will influence production in a market-driven economy. Standing at this point, we can say that sustainable consumption is more important than sustainable production. Thus, education on sustainable consumption will be an effective way for encouraging sustainable development. Here are some suggestions for promoting education on sustainable consumption:

#### **9.5.1 Strengthen policy on education for sustainable consumption**

Many efforts have been made on formulating and completing rules and regulations for sustainable consumption. Also, many actions have been taken to construct standards and monitoring systems for sustainable consumption. However, education on sustainable consumption is often ignored. ESC is urgently needed to strengthen the public awareness of sustainable consumption, and it should be interpreted in the policy making on sustainable consumption.

#### **9.5.2 Integrate education for sustainable consumption in the formal education system**

Education for sustainable consumption should be integrated in the formal education system. Various contents should be designed for the needs of different ages and diverse cultures and lifestyles. Training workshops and seminars for school teachers on sustainable consumption issues should also be strengthened to address how to encourage young people to think about their consumption behaviours, their effects on the environment, and how to make good decisions on consumption.

#### **9.5.3 Public communication on sustainable consumption**

Media is especially influential on youth consumption. They are important driving forces in shaping youth aspirations and values. Various media including TV, newspaper, broadcast, internet and

magazines should be encouraged to attract the public to concern and discussions about the sustainable consumption and responsible consumption behaviour.

Big events, such as Environmental Day, Earth Day, Consumers Right Day, and Tree Planting Day can be good opportunities for public communication on sustainable consumption.

#### **9.5.4 NGO's role in education for sustainable consumption**

NGOs are active in public education and communication on sustainable consumption. Government authorities and relevant organisations can establish funding opportunities to support NGOs to implement educational projects on sustainable consumption.

#### **9.5.5 Integrate sustainable consumption into acknowledged national wide environmental education programmes (such as green school and green community)**

Green school, green community programmes are widely known and can directly influence more people in China. Sustainable consumption can be an important theme in these programmes so that more and more people can get information, training and communication on the topic of sustainable consumption through these platforms.



## CHAPTER TEN

### **SITUATIONAL ANALYSIS AND POLICY IMPLEMENTATION ON EDUCATION FOR SUSTAINABLE CONSUMPTION IN JAPAN WITH INTER-LINKAGES BETWEEN THE MARRAKECH PROCESS AND THE UN DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT**

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#### **10.1 Introduction**

For the development of educational policy related to Sustainable Consumption, *UN Guidelines for Consumer Protection*<sup>3</sup> (UNCTAD/DITC/CLP/Misc.21) needs to be highly reflected. In 1995, the Economic and Social Council of the United Nations requested the Secretary-General to expand the Guidelines from 1985 to include elements on “Sustainable Consumption”. The expansion process of the UN Consumer Guidelines concluded in 1999 with the adoption of the new Guidelines.

The Guidelines were developed with the following core objectives: (1) to assist countries in achieving or maintaining adequate protection for their population as consumers; (2) to facilitate production and distribution patterns responsive to the needs and desires of consumers; (3) to encourage high levels of ethical conduct for those engaged in the production and distribution of goods and services to consumers; (4) to assist countries in curbing abusive business practices by all enterprises at the national and international levels which adversely affect consumers; (5) to facilitate the development of independent consumer groups; (6) to further international cooperation in the field of consumer protection; (7) to encourage the development of market conditions which provide consumers with greater choice at lower prices; and (8) to promote sustainable consumption. The UN Guidelines for Consumer Protection remain an extremely valuable tool in national policy development, and in the design and implementation of consumer protection legislation. The Guidelines are considered to represent a dynamic process, adapting to changing conditions. It is stated that Governments should develop or maintain a strong consumer protection policy, taking into account the Guidelines set out and relevant international agreements.

In particular, Chapter G: “Promotion of Sustainable Consumption” of the Guideline, which consists of fourteen items, has great importance. Each government should set its own priorities for the protection of consumers in accordance with the economic, social and environmental circumstances of the country and the needs of its population, bearing in mind the cost and benefits of proposed measures. Furthermore, each government is expected to: (1) develop and implement strategies that promote Sustainable Consumption through a mix of policies; (2) encourage the design, development and use of products and services; (3) promote the development and use of national and international environmental health and safety standards for products and services; (4) encourage impartial environmental testing of products; (5) promote awareness of the health-related benefits of Sustainable Consumption and Production patterns; (6) encourage the transformation of unsustainable consumption patterns through the development and use of new environmentally sound products and services and new technologies; (7) create or strengthen effective regulatory

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<sup>3</sup> UNCTAD, 2001, United Nations Guidelines for Consumer Protection (as expanded in 1999), UNCTAD/DITC/CLP/Misc.21

mechanisms; (8) consider arrange of economic instruments; (9) develop indicators, methodologies and databases for measuring progress towards Sustainable Consumption at all levels; (10) take the lead in introducing sustainable practices in their own operations; and (11) promote research on consumer behavior related to environmental damage. According to the Guidelines, it is stated on the promotion of Sustainable Consumption in “G: Promotion of Sustainable Consumption”, see the details as follows (Table 10.1).

**TABLE 10.1 – “G: PROMOTION OF SUSTAINABLE CONSUMPTION”, OF THE UN GUIDELINES (2001)**

<p>42. Sustainable consumption includes meeting the needs of present and future generations for goods and services in ways that are economically, socially and environmentally sustainable.</p> <p>43. Responsibility for sustainable consumption is shared by all members and organisations of society, with informed consumers, Government, business, labour organisations, and consumer and environmental organisations playing particularly important roles. Informed consumers have an essential role in promoting consumption that is environmentally, economically and socially sustainable, including through the effects of their choices on producers. Governments should promote the development and implementation of policies for sustainable consumption and the integration of those policies with other public policies. Government policy-making should be conducted in consultation with business, consumer and environmental organisations, and other concerned groups. Business has a responsibility for promoting sustainable consumption through the design, production and distribution of goods and services. Consumer and environmental organisations have a responsibility for promoting public participation and debate on sustainable consumption, for informing consumers, and for working with government and business towards sustainable consumption.</p> <p>44. Governments, in partnership with business and relevant organisations of civil society, should develop and implement strategies that promote sustainable consumption through a mix of policies that could include regulations; economic and social instruments; sectoral policies in such areas as land use, transport, energy and housing; information programmes to raise awareness of the impact of consumption patterns; removal of subsidies that promote unsustainable patterns of consumption and production; and promotion of sector-specific environmental-management best practices.</p> <p>45. Governments should encourage the design, development and use of products and services that are safe and energy and resource efficient, considering their full life-cycle impacts. Governments should encourage recycling programmes that encourage consumers to both recycle wastes and purchase recycled products.</p> <p>46. Governments should promote the development and use of national and international environmental health and safety standards for products and services, such standards should not result in disguised barriers to trade.</p> <p>47. Governments should encourage impartial environmental testing of products.</p> <p>48. Governments should safely manage environmentally harmful uses of substances and encourage the development of environmentally sound alternatives for such uses. New potentially hazardous substances should be evaluated on a scientific basis for their long-term environmental impact prior to distribution.</p> <p>49. Governments should promote awareness of the health-related benefits of sustainable consumption and production patterns, bearing in mind both the direct effects on individual health and the collective effects through environmental protection.</p> <p>50. Governments, in partnership with the private sector and other relevant organisations, should encourage the transformation of unsustainable consumption patterns through the development and use of new environmentally sound products, services and new technologies, including information and communication technologies, that can meet consumer needs while reducing pollution and depletion of natural resources.</p> <p>51. Governments are encouraged to create or strengthen effective regulatory mechanisms for the protection of consumers, including aspects of sustainable consumption.</p> <p>52. Governments should consider a range of economic instruments, such as fiscal instruments and internalisation of environmental costs, to promote sustainable consumption, taking into account social needs, the need for disincentives for unsustainable practices and incentives for more sustainable practices, while avoiding potential negative effects for market access, in particular for developing countries.</p> <p>53. Governments, in cooperation with business and other relevant groups, should develop indicators, methodologies and databases for measuring progress towards sustainable consumption at all levels. This information should be publicly available.</p>
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54. Governments and international agencies should take the lead in introducing sustainable practices in their own operations, in particular through their procurement policies. Government procurement, as appropriate, should encourage development and use of environmentally sound products and services.
55. Governments and other relevant organisations should promote research on consumer behaviour related to environmental damage in order to identify ways to make consumption patterns more sustainable.

Note: UNCTAD, 2001, UNCTAD/DITC/CLP/Misc.21

Further, with regard to the Education, the Guideline also states the importance of Consumer Education. At “F: Education and Information Programme” of the Guideline, the following is stated:

*35. Governments should develop or encourage the development of general consumer education and information programmes, including information on the environmental impacts of consumer choices and behavior and the possible implications, including benefits and costs, of changes in consumption, bearing in mind the cultural traditions of the people concerned. The aim of such programmes should be to enable people to act as discriminating consumers, capable of making an informed choice of goods and services, and conscious of their rights and responsibilities. In developing such programmes, special attention should be given to the needs of disadvantaged consumers, in both rural and urban areas, including low-income consumers and those with low or non-existent literacy levels. Consumer groups, business and other relevant organisations of civil society should be involved in these educational efforts.*

In 2001, UNEP's Division of Technology, Industry and Economics (UNEP-DTIE) and Consumers International (CI) conducted a global survey of their implementation.<sup>4</sup> The recommendations of “G: Promotion of Sustainable Consumption” was highly respected and was targeted to government. This joint UNEP-DTIE/CI research project was to discover whether selected national governments are aware of the existence of the Sustainable Consumption (SC) section in the UN Consumer Guidelines and to determine what governments have done to implement these SC elements in their national policy frameworks. The questionnaire was prepared with thirteen question items along with the Guideline. Then responses to these questions were then evaluated. More than 150 countries and/or local governments responded to the questionnaire survey, and 50 countries and/or local governments replied. When seeing the member countries of OECD, 18 countries of OECD responded to the survey, while, 32 non-member countries of OECD, such as countries of Asia and the Pacific (7 countries), Middle East (2 countries), Latin America (9 countries), Middle and East Europe (5 countries), Africa (9 countries) have responded to the survey. As the result of the survey, UNEP and CI announced the ranking on the degree of “quality of life” with Sustainable Consumption. In the case of Japan, it was ranked 7 points out of 10 potential points, which indicates a comparable level with “developing countries” such as Argentina and Zimbabwe.

## 10.2 Marrakech Process and the Education for Sustainable Consumption Task Force

The thematic area of “Sustainable Consumption and Production” is addressed at international level through the Marrakech Process as a response to the recommendations of the Johannesburg Summit (2002). In the third chapter of the *Johannesburg Plan of Implementation*, it is stated that governments, international organisations and civil society are invited to encourage and promote the development of a 10Year Framework of Programmes (10YFP) to accelerate the shift towards Sustainable Consumption and Production. The 10YFP will be prepared within the “Marrakech

<sup>4</sup> UNEP, 2001, *United Nations Guidelines for Consumer Protection: Elements on Sustainable Consumption, A global research project assessing success of implementation*, UNEP

Process”, which is jointly coordinated by UNEP and UNDESA, and will be discussed during the 18th and 19th sessions of the UN Commission on Sustainable Development (2010/2011). In considering the experience which Italy achieved with regards to education as a key tool in promoting sustainable development, the Ministry for the Environment, Land and Sea launched an international Task Force on Education for Sustainable Consumption (New York, CSD, May 2006), which supports the development of 10YFP in the field of education. The Italian-led Task Force<sup>5</sup> supports the Marrakech Process through political initiatives, research activities and pilot projects in this sector. Further, it is stated that the Task Force is also supporting work on the UN Decade for Education for Sustainable Development (DESD).

### 10.3 UN Decade of Education for Sustainable Development (DESD, 2005-14) and Inter-Linkages with the Marrakech Process



In December 2002, the United Nations General Assembly (UNGA) adopted resolution 57/254 to put in place a United Nations Decade of Education for Sustainable Development (DESD), spanning from 2005 to 2014. UNESCO was requested to lead the Decade and developed an International Implementation Scheme (DESD-IIS) for the Decade. According to the DESD International Implementation Scheme (DESD-IIS), (UNESCO, 2005)<sup>6</sup>, the goal of the Decade (2005-2014, DESD) is to integrate the principles, values, and practices of sustainable development into all aspects of education and learning. This educational effort will encourage changes towards behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations. ESD is regarded as more value oriented, respecting change of lifestyles, and collective action for positive social transformation. It can be said that the main approach for Sustainable Consumption is to establish a realistic way as well as an ideal way for the positive social transformation through both individual and collective participation in the processes of choosing and using goods and services.

As mentioned above, both the Marrakech Process and the UN Decade of Education for Sustainable Development (DESD) have great potential for the mobilisation of people to choose and use goods and services for positive social transformation. However, the inter-linkages between the Marrakech Process and DESD seem to be not well coordinated. To further involve people in Sustainable Consumption activities and in order to link these activities with daily life, strong inter-linkages between the Marrakech Process and DESD need to be promoted through national policy development and actual implementation.

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<sup>5</sup> The objective of the task force is to achieve progress in introducing sustainable consumption and production issues in particular into formal curricula without omitting to make the link to nonformal and informal education actions and activities which are strongly interrelated with formal education, with the aim of supporting the Marrakech process through initiatives, activities and pilot projects in this sector at regional and national level. Activities include: (1) a collection of good practices; (2) a database and a technical planner on ESC; (3) the drafting of guidelines on the introduction of ESC into formal learning processes; (4) the creation of linkages and synergies between the Task Force initiatives and relevant regional and international organisations active in the field of ESC; (5) the definition of sets of indicators and quality criteria for monitoring and evaluation.

<http://esa.un.org/marrakechprocess/tfedususconsump.shtml>

<sup>6</sup> UNESCO, 2005, United Nations Decade of ESD (2005-14) International Implementation Scheme. Paris: UNESCO.

## 10.4 Policy on Education for Sustainable Consumption in Japan

The concept of Sustainable Development was discussed at the Rio Earth Summit in 1992 and *Agenda 21* was adopted as a plan for concrete action for Sustainable Development. In Chapter IV of *Agenda 21*, it indicates the importance of Sustainable Consumption and Production and calls for concrete action against unsustainable consumption and production patterns. In Japan, responding to the *Agenda 21*, the Japanese Government submitted a report on its national reaction to the UN. In the year of 1992, the Ministry of Education introduced Consumer Education into school curriculum. In the sectors of non-profit and business & industries, the Green Purchasing Network (GPN) was established in 1996, and the first Eco Products Fair was held in support of the business sector. In the year 2000, Green Purchasing Law was enacted in Japan. With regard to the procurement policy for eco-friendly goods, in the law, Article 7 states that: (1) the head of each ministry or agency and the head of each independent administrative institution, etc. (or the representative in the case of a special legal entity; the same shall apply hereinafter) shall draw up every fiscal year a policy for the promotion of procurement of eco-friendly goods, etc. in relation to the procurement of goods, etc., while taking into account the budget, activities and planned projects for the fiscal year concerned. The mandate of this law contributed to the dramatic dissemination of activities among governmental sectors.

In 2002, *Fundamental Principles of the Treatment for Global Warming* (Aratana Chikyuondankataisaku Taikou) was set. In these principles, it calls for the promotion of collective action inviting all the stakeholders, such as national, local, business & industries and citizens, and support for the expectation of changing lifestyles as transition of consumption and production patterns. Since 2000, some initiatives have been started by different institutions of the government, such as the Ministry of Economy, Trade and Industry (METI), the Ministry of Education, and the Cabinet Office. The history of political implementation and some initiatives on Education for Sustainable Consumption in Japan can be seen in the Table 10.2.

**TABLE 10.2 – HISTORY OF EDUCATION FOR SUSTAINABLE CONSUMPTION IN JAPAN**

1992: MoE introduced Consumer Education in School curriculum
1996: Established Green Purchasing Network
1999: 1 <sup>st</sup> Eco Products Fair
2000: Enacted Green Purchasing Law
2002: Japanese government proposed to the start of UN Decade of Education for Sustainable Development (DESD) at the Johannesburg Meeting (WSSD)
2003: METI started Sustainable Consumption Project(~2005)
2004: MoE published Consumer Education Text Book for High School
2005: Cabinet Office supported to develop Environmental Consumer Education
2006: Started Teacher Training Course of Environmental Consumer Education
2008: METI started Ecological Foot Print Project: Tokyo City University (TCU) introduced Carbon Offset for TCU Fair
2009: Basic Policy on Promoting Green Purchasing Multi-stakeholder Forum on Social Responsibility for Sustainable Future, agreed collaborative strategy for Sustainable Development, including the vision for the future, action plans of stakeholders, and policy proposals to the government until 2010.

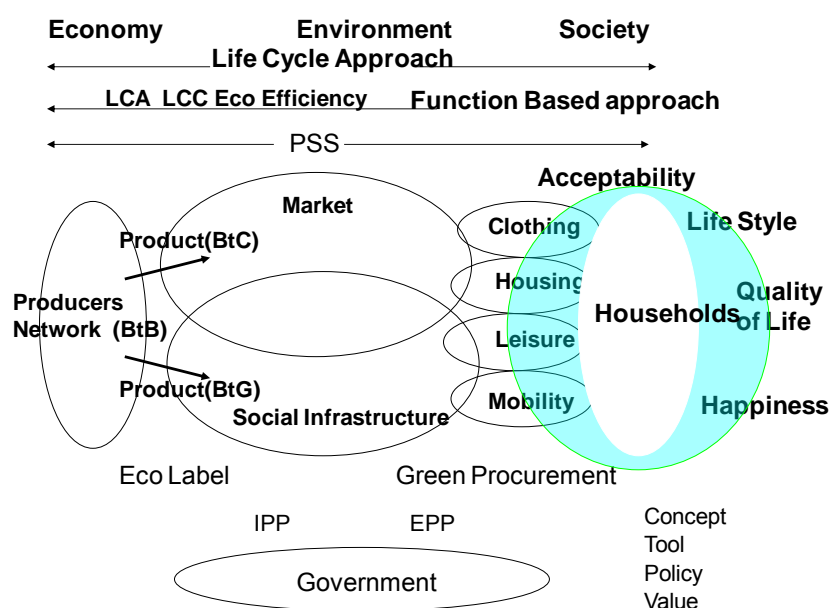
**TABLE 10.3 – BASIC POLICY ON PROMOTING GREEN PURCHASING (2009)**

<p><u>Basic Philosophy for Procurement of Eco-Friendly Items</u></p> <p>(1) Environmental attributes should be considered in addition to price and quality considerations</p> <p>(2) Consideration from environmentally diverse viewpoints:</p> <ul style="list-style-type: none"><li>- Products that contribute to the formation of a socio-economic system through an environmentally sound material cycle</li><li>- Products that contribute to reducing greenhouse gases</li></ul> <p>(3) Consider reducing environmental impacts throughout the product’s lifecycle, from manufacture to disposal.</p> <p>(4) Commit to long-term use, correct utilisation, and appropriate disposal of procured goods and services</p> <ul style="list-style-type: none"><li>- (separation into appropriate waste streams)</li></ul> <p><u>Designated Procurement Items and Evaluation Criteria</u></p> <p>(1) As a general rule, clear numeric data shall be used for selecting designated procurement items.</p> <p>(2) If clear numeric criteria cannot be established, attributes that contribute to reducing environmental impact shall be defined as “factors for consideration.”</p> <p>(3) As needed, these standards can be revised in response to product improvement, market development, and further development of our scientific knowledge of the products.</p> <p>(4) When items included in the designated procurement items list become readily available in the marketplace, the item shall be omitted from the listing. (i.e. televisions, calculators)</p> <hr/> <p style="text-align: right;">Shohei Yamada, The Green Purchasing Law, and Promoting Green Procurement in Japan, Presentation Materials at the Pune University, the Ministry of Environment.</p>
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### **10.5 ESC Practices in the Japan – The Case of the Green Purchasing Network**

As one of best practice for the promotion of Sustainable Consumption and Production, the Green Purchasing Network (GPN) in Japan has been contributed as a model for the positive social transformation. “Green Purchasing” is one of key elements with greater choice and use of goods and services, which is promoting transition of consumption and production patterns. For the effective development of Green Purchasing, guidelines for the procurement of Eco-Friendly Items need to be developed. Furthermore, the guidelines need to be considered in terms of the “Acceptability” for consumers. International cooperation for their development is also needed as the materials and goods are inter-related at the world level. In this section, by identifying the key factors of success of GPN in Japan and the outlook for the future, the necessary roles and responsibility of each stakeholder that are critical for collective action are identified.

FIGURE 10.1 – INTERRELATIONS AMONG STAKEHOLDERS FOR THE PROMOTION OF SUSTAINABLE CONSUMPTION AND PRODUCTION



The Green Purchasing Network (GPN)<sup>7</sup> was established in February 1996 in order to promote the concept and practice of Green Purchasing in Japan. Around 3,000 member organisations (as of Jun 2009) including businesses, local governments, consumer groups, environmental NGOs, and cooperative associations have been participated to the Network. Among its activities, the GPN draws up purchasing guidelines for various products, maintains an extensive product database, holds seminars as well as study meetings, and awards commendations to organisations which develop and implement innovative Green Purchasing programmes. Since its establishment, GPN – as one of the largest environmental organisations in Japan – has taken a leading role in promoting green purchasing in Japan.

### 10.5.1 Key Factors for Success in Japan

During the First Stage of GPN (1995-2000), many pioneering activities were implemented by lots of environmentally conscious major companies and local governments. Through their activities, implementing bodies were able to stimulate each other, which contributed to the improvement of their overall activities. Through the establishment of GPN in 1996, the network succeeded to involve a wide range of businesses, public and NGO sectors in green purchasing. In the background, the Ministry of Environment has supported the voluntary activities and GPN. GPN in cooperation with the Ministry of Environment, introduced success stories by providing awards and holding seminars. Furthermore, the business sector has made considerable efforts to develop eco products. During the Second Stage (2000-present), thanks to the enactment of Green Purchasing Law in 2002, the mandate of the Green Purchasing Law contributed to the dramatic dissemination of the activities among governmental sectors. From the business sector side, companies have worked hard to meet the criteria for products designated by the law. When identifying key factors for success in Japan, it can be seen that each stakeholder has taken their initiative with clear roles and responsibilities for collective actions.

<sup>7</sup> For further information can be accessed from <http://www.gpn.jp/English/index.html>

### 10.5.2 Outlook for the Future

For the further implementation of Green Purchasing, it is recommended that: (1) the scope of green purchasing is expanded (food and beverage, mobile phone, dishwasher, electricity, transportation, cleaning service, construction, catering service, financial services, stores, etc.); (2) to raise the criteria and enhance the guidelines (“greener” purchasing can promote greener products development); (3) encourage voluntary activities exceeding the level of Green Purchasing Law (many of local governments are satisfied with imitating central government’s practice; furthering diverse actions to explore new product areas and raising of the level of criteria is needed); (4) strengthen capacity building of purchasing manager; (5) broaden activities to small and medium sized municipalities and corporations; and (6) strive to change individual consumers’ behaviors. For the international activities, recommendations are (1) launching regional networks to reinforce local based activities; and (2) disseminating green purchasing around the world.

### 10.6 Recommendations at Regional Workshop on ESC, in Beijing, China – 16-17 July 2009

#### International Level

- UN Guideline on Sustainable Consumption has room to be revised, in terms of the development of information sharing system for consumers with LCA methods. Research activities are also needed in this regard. Carbon foot print, or/and Carbon offset needs to be promoted at the policy implementation level.
- The inter-linkages between Marrakech Process and DESD seem to be not coordinated well. For further activities by involving people, and in linking with daily life, inter-linkages both Marrakech Process and DESD need to be promoted through national policy development and actual implementation.

#### National Level

- In China, “Green School 「綠色学校制度」” has started since 1996, which promote Environmental Education at all areas in the country, in accordance with National Programme on Environmental Education, propaganda and Action 「全国環境宣傳教育行動綱要」(1996 – 2010), under the support of Chinese Government. It can be said that the infrastructure for the promotion of Environmental Education for Sustainable Consumption has already prepared for further implementation. ROK as well as Japan need to implement such a programme like “Green School” for the promotion of consumer education.
- Research activities on the consumption activities and trends and on the decision making process of consumers have great diversity through the research fields of economics, management, marketing, psychology, sociology, each of which is based on a different background and theoretical framework. However, there are less research activities in the field of “Acceptability” of consumers which needs to be highly promoted and not focused on the view of the production and marketing side. Through a clear understanding of the consumers, it is needed to develop a theoretical framework and continuous surveys, which are interdisciplinary and holistic as life styles.
- Information for consumers can be categorized into generic aspects and specific aspects. “Ecolabels” can be categorized into the latter aspects. Providing LCA related information on

goods and services is limited to the targets. Consumer education needs to be promoted to raise awareness of sustainable consumption and promote collective action in their daily life.

- The development of an “Environmental Information System” is needed for assisting consumer’s choice and the use of goods and services in complex conditions.
- Partnership approaches which are adaptable among government and Business sectors are also needed.
- Improve resource delivery mechanisms and strengthen the tools for information sharing among consumers.
- In regards to the tools for policy implementation for the promotion of Sustainable consumption, there are some ways to better provide information for consumers by conducting campaign with overlapping economic, regulatory and social aspects.

#### Consideration

- Consideration on “Acceptability” for consumers needs to be prioritized, with views of design, functionality, quality, cost, information, and usefulness of the goods and services.
- Consideration of “Rebound Effect” as consumer behavior.
- Consideration of total amount of resource use not only as the eco-efficiency of the use of resources.
- Consideration on sharing system of goods and services, such as rental services, car sharing.
- Promotion of LCA thinking for the decision making process, educational process and practical process.
- It is Important to consider two principles on Sustainable Consumption, which include “consume less (quantity aspects)” and “consume better (quality aspects)”.





**CHAPTER ELEVEN**  
**A CASE STUDY ON SUSTAINABLE CONSUMPTION:**  
**REVIEWING THE ACTIVITIES CONDUCTED BY THE CONSUMERS KOREA**

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The activities performed by the Consumers Korea in relation to the education of sustainable consumption can be categorised into two main pillars. First, Consumer Korea is involved in campaign activities to promote sustainable consumption practices. Second, the provision of detailed product information in relation to sustainable consumption is a main priority for Consumer Korea's work. These activities are aimed at leading sustainable production and changing the market towards becoming eco-friendly in order for consumers to be able to select proper products, hence, enhancing consumers to transfer to sustainable consumption patterns. This report will look at the two categories with some relevant examples, the Energy Winner Awards, the Eco-leadership Camp, the Annual Competition for Good Farm Produce Brands, and the case of information provision regarding the safety issues of plastic food containers made from recycled plastics, to name but a few.

In order for sustainable consumption to be affordable, it is essential that most of all, each social component should understand the importance of education for sustainable consumption and provide effort to implement this ESC. In this regard, the government is advised to readjust current policies both on the environment and towards consumers in accordance with the perspective of sustainable consumption. Unfortunately, recent academic studies on issues relevant to sustainable consumption and its education have found that the current policy is insufficient. As a consequence, the current policies face a major gap in leaving behind consumers and consumer organisations which should be prioritised as the main stakeholders of sustainable consumption and education. Therefore, it is necessary to overcome the imbalance in recognising green consumption among stakeholders, and the existing gaps between each social component's implementation of ESC must be reconciled to support a society wide transition towards sustainable consumption.

## **11.1 Consumers and Consumerism**

### **11.1.1 Changes in the Conception of Consumers**

One of the traditional characteristics of consumer organisations can be defined as assisting consumers to make informed choices by providing sufficient information. However, the provision of specific types of information can vary according to the understanding of consumers and who they are. For instance, consumers can mainly be categorised as buyers, the producer of wastes, or the ultimate customers of resources.

If consumers are defined as the purchasers of products and services, they should be given product information including price and actual weight/quantity in order to assure their economical interests.

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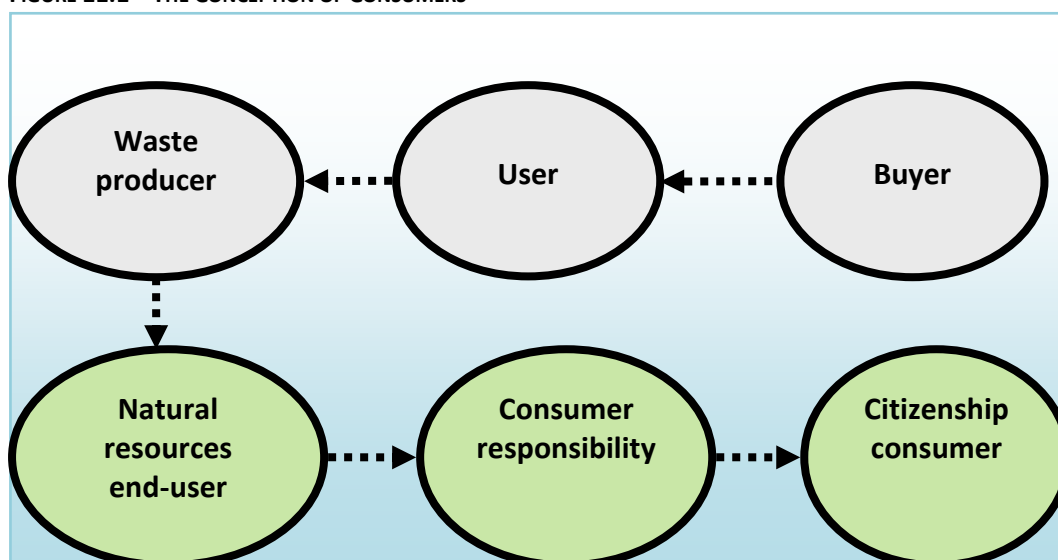
<sup>2</sup> *Chief of Network Team, Consumers Korea*

Yet, if they are also regarded as the users, they should additionally be given information that encompasses a range of safety concerns which consumers may experience while using the products or services. It is doubtless to say consumers are both the producers of wastes and the ultimate customers of resources at the same time. This conception of the consumers' role has been acknowledged since 1970s, and included to this is the recognition of consumers' responsibilities for the use of insufficient resources and the conservation of the environment (Song & Kim, 1987). That is, the concerns of individuals' consumption are not merely handled as personal issues but also can include social problems. This change in understanding of the consumer placed an emphasis on the responsibilities of consumers.

Today, the activities of consumer organisations are embracing the conception that consumers are purchasers, users and the producers of wastes at the same time. Therefore, recently, the activities have been focusing on not only the aspect of economical efficiency but also the consciousness process which enhances the understanding of the relationship between nature and human activities. This approach considers safety issues and the efficiency of resources, while at the same time underlying a strong focus on the idea of securing sustainable consumption.

The International Organisation of Consumers Union (IOCU) proclaimed the importance of ecological and social responsibilities of the consumer in 1980. This emphasised the social relation of consumers and their activities. The ecological responsibility stresses the situation that the indiscreet use of resources and energy by consumers critically affects the environment. The social responsibility insists that consumers should be educated not to overlook the destruction of cultural and social traditions as a resulted of prioritising consumers' economic interests; and furthermore the wasteful consumption patterns of and development of limited resources for the rich should be controlled for the sake of the neglected components of society. Consumers' consumption patterns thus require not only the training for transforming to sensible consumerism but also the establishment of a consumption culture which considers these social relationships.

**FIGURE 11.1 – THE CONCEPTION OF CONSUMERS**



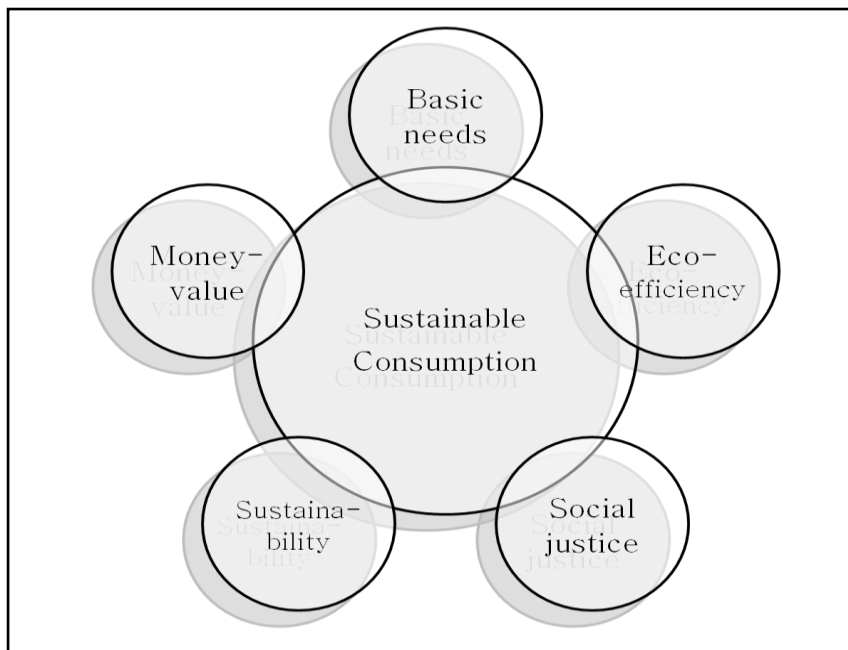
As the picture presents, the conception of consumers merely being good is no longer enough as they are required to make decisions at an international level. This further explains why consumer organisations should seek sustainable consumption.

### 11.1.2 Consumerism

In 1992, the United Nations held the Conference on Environment and Development in Rio, Brazil, and delegates from 178 nations consented on the common goals to save the earth by adopting *Agenda 21* which presents the strategies for improvement and action plans. Since then, governments, business entities and civil societies have activated their strategies for sustainable economy. Here, the necessity of acknowledging the fact that the major causative factors of destroying the environment are unsustainable production and consumption patterns which are manifested in developed countries arises (*Agenda 21*, Chapter 4-3). In addition, the unequal production and consumption patterns over the world should be taken into account (*Agenda 21*, Chapter 4-4). That is, there are two basic factors which cause the destruction of the global environment. First is the unsustainable consumption patterns in developed countries, and second is the poverty in poor countries (Song et al., 1997). Durning indicated that modern people in developed countries have been blessed with the singularly most abundant lifestyle in history while there have been no changes in the consumption patterns of the poor population of the world (2001).

There are five factors that influence consumerism towards sustainable consumption: money value, basic needs, eco-efficiency, social justice, and sustainability. It is also suggested that the primary goal of sustainable consumerism is creating a balance between these factors (refer to Figure 11.2).

FIGURE 11.2 – THE CONCEPTION OF CONSUMERISM

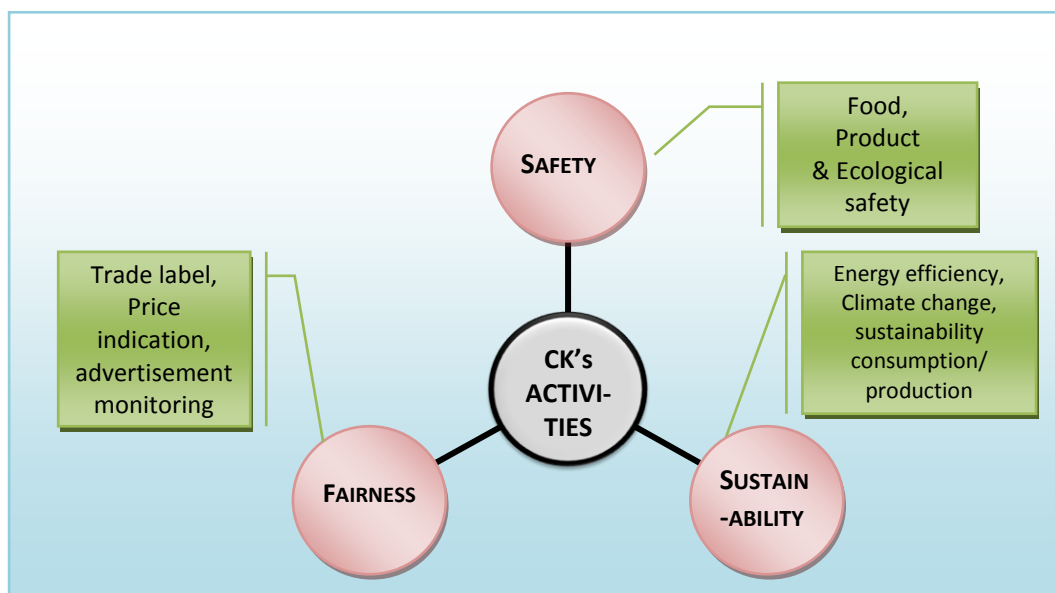


## 11.2 Education for Sustainable Consumption – Focusing on Consumers

Since the Rio declaration of UNEP in 1992, there has been strong consensus on sustainable consumption at the level of its conception, however various interpretations and applications have emerged at the same time. The activities on sustainable consumption by consumer organisations have been recommending eco-friendly products, efficient energy use, safe consumption both for human body and the environment in order to decrease the environmental effects that result from increased consumption. Focus has also been paid to the options of socially marginalised people in order to promote socio-cultural sustainability.

Consumers Korea’s major activities that aim to facilitate sustainable consumption can fall into three categories (refer to Figure 11.3). The first one is safety. The range of hazards of products can vary from produce to industrial products. The approach is taken that if something is proved safe for humans, it should also be safe for the environment too. This is the main reason that Consumers Korea has been focusing on the safety issues including food, product and ecological safety.

FIGURE 11.3 – CONSUMERS KOREA’S ACTIVITIES ON SUSTAINABLE CONSUMPTION



Secondly, fairness and transparency are essential components in trading. To enhance them, Consumers Korea pays attention to clauses, price indication and advertisement monitoring. In relation to sustainable consumption, Consumers Korea supports the fair trade label which helps to promote socio-cultural sustainability.

Thirdly, Consumers Korea activities include energy efficiency, mitigation and remediation for climate change, along with SPC. Energy efficiency may also be interpreted as the provision of the same quality of services while at the same time decreasing the destruction of the environment and the waste of natural resources. The primary goal of energy efficiency strategies is to maximise the efficiency of energy use, minimise pollution and provide safe energy stably.

The education for sustainable consumption conducted by Consumers Korea consists of two major components, which are campaigning and the provision of information. The former aims at the universal implementation of sustainable consumption by participation of consumers and business entities, together with the government. This is to convince the business entities to produce eco-friendly products in response to consumers' demand. Also, this is to transform the market towards supporting sustainable consumption through the exposure of eco-friendly products, and thus support consumers to be able to choose such products. Good practice examples are suggested for the Energy Winner Awards and the Annual Competition for Good Farm Produce Brands.

The provision of sufficient information regarding relevant products is acknowledged as an essential component of ESC as this enables consumers to make decisions on products rationally. For a long period, the information given to consumers in developed countries has emphasised only economic efficiency (such as price comparison information or the durability of products), however information concerning safety, environmental impacts and social impacts have recently been included. Consumers Korea has published the monthly magazine "Sobija Report" for the purpose of providing product information to consumers since 2004.

### **11.3 The Cases of Sustainable Consumption Education**

#### **11.3.1 Campaign – Energy Winner Awards**

The activities for energy efficiency provide exemplary cases of the sustainable consumption movement. Energy efficiency is a movement for SCP which aims at achieving strategic consumer progresses to be eco-friendly throughout the life cycle of a product including production, purchasing, using and discarding. To consider merely consumers' purchasing acts, green consumption could be achieved by selecting recycled products. However, this is a passive movement, as consumers would not choose such recycled products if they experience a burden of price. Also, this is a limited movement as consumers would choose other products when the recycled products are not available on the market. It is true to say that consumers who use less energy would be green consumers in regards to the fact that energy concerns relate directly to environmental issues. When considering the circumstances of energy use when there are no substitutes available, the energy efficiency movement might result in compelling consumers to accept inconvenience and emotional burdens.

Encouraging the production of energy efficient products and promoting their purchase and use by consumers are sought as further ways of increasing the energy efficiency movement. This can enable consumers to purchase energy efficient products from the market at any occasion, therefore the use of such products results in synergistic effects which as a consequence also contribute to a savings of expenditure for the consumer. This explains why the energy efficiency movement is a form of sustainable consumption.

In this context, Consumers Korea founded Energy Winner Awards in 1997, and it has been a great exemplar of the energy efficiency movement. A large number of experts assess energy efficient products every year for their excellence and then choose those with good performance to receive the awards. Since its establishment, Energy Winner Awards has been entitled as a component of the green consumption movement and given a role of governance through the participation of various

stakeholders including the government, press, and relevant major business entities on a competitive basis. At the international level, Energy Winner Awards has been acknowledged as an exemplar of a active means for encouraging the green consumption movement. United Nations Economic and Social Commission for Asia and the Pacific (UNESACP) has co-hosted the project, and Energy Winner Awards has inspired many other countries recently to implement similar programmes.

It is crucial that more and more companies participate in Energy Winner Awards in the future. As energy efficiency is directly derived from technological advances, it therefore requires intensive financial investment. Consequently, it has been identified that large enterprises have been applying for Energy Winner Awards on a much more active scale as compared to that of small-scaled companies due to the financial burdens of research and design. Thus, in order to attract the participation of small-scaled companies, it is necessary to identify and consider the development of items which are appropriate for small-scaled companies. In addition, methods to increase the recognition of the Energy Winner Awards and the promotion of those achieving the award should be sought. Furthermore, it is necessary to differentiate this award from the other awards which are given by unregulated bodies other than consumer organisations for commercial purposes.

### **11.3.2 The Provision of Information – Sobija Report**

#### Food Consumption that is safe for the Human Body and the Environment

The most closely related aspect of the sustainable consumption movement to the essential rights of consumers could be the issue of safe consumption. The safe consumption movement can be described as a life movement for the sake of the human body and the environment. One of the early examples of this movement is the rejection to pesticides. Throughout the 1970s and 80s, pesticides had been widely used and regarded as a means to maximise agricultural productivity, hence contribute to world-wide food security. However, the early promotion of pesticide use ignored the concerns about social and environmental risks that could result from their use. In 1986, Consumers Korea surveyed the actual condition in regard to pesticide use in Korea in accordance with the UN Consolidated List which contains banned or restricted pesticides. This can be seen as a first, active and systemic approach made by a consumer organisation in order to prevent the consumption of hazardous substances which would affect human health and the environment. Following this survey, Consumers Korea conducted follow up research in 1988 on pesticides that were internationally banned yet still being regularly used in Korea. Relying on the research results, Consumers Korea strongly urged the government to ban such pesticides.

In 1989, a historically recorded event occurred owing to consumer organisations revealing the fact that imported grapefruits from the United States had been cultivated by a pesticide which contained a carcinogen, then known as ALA. So called, the ALA case led to a rise in alarm over the prevalence of pesticides in Korean society and concerns for public safety. At that time, the government of the United States accused the government of Korea of implementing an unfair trade barrier and tried to employ political pressure on the Korean government. This ignited a nation-wide boycott against American grapefruits. Due to the irrational political intervention by the United States government, even though the consumer organisations were facing a combat against Goliath, this speared the consumer movement on food safety issues to become one of the principle issues of the sustainable consumption movement in Korea.

Recently, the consumer movement has focused on mad cow disease and genetically modified organisms (GMO). Mad cow disease is an illness that is caused by feeding cows with the same species in direct contradiction to the laws of nature. The scare over mad cow disease provided a strong warning regarding the state of the modern food chain and its effects on human health. The danger of mad cow disease is its spread to individuals who consume a same species fed cow. In regards to the concerns over the modern food chain and meat production, carnivorous lifestyle may be directly linked to unsustainable consumption. For this reason, vegetarianism does not merely have a meaning in terms of religious stance, but also importance for the perspective of sustainable consumption. Lately, the Korean government has decided to allow the importation of beef from the United States, which is concerned to have been exposed to mad cow disease. Korean consumers have objected to this decision by presenting a new consumption paradigm. GMO can be analysed in a similar manner. The transplantation of modified genetic properties onto a natural organism relying on artificial methods is genetic modification. GMO, consequently, would threaten other natural lives and potentially cause unknown risks in people consuming genetically modified food. Therefore, the consumer movement on safety has objected to and promoted expulsion of such potentially hazardous and unsustainable products.

#### Best Choice – Considering Environment and Safety

Consumers Korea provides consumers with product information, named “Best Choice”, which comprehensively considers the economic efficiency, environmental impacts and safety aspects of the products. Firstly, Consumers Korea hosts the Annual Competition for Good Farm Produce Brands in conjunction with the Ministry of Food and Agriculture. The assessment criteria includes antibiotics, hygiene, livestock feed, taste and price, which thoroughly cover the issues of safety, environment and economy.

People generally tend to believe that choosing recycled products would be the best choice, however, if lead is detected in food containers which were made from recycled plastics, it would definitely not be the best choice.

Having said that, the production and provision of information that would facilitate sustainable consumption is a role designated to consumer organisations to intensify their capacity and to continue in line with relevant activities. Nevertheless, the high cost for experiments and testing is one of the major concerns that consumer organisations have to secure a means to overcome. Regulations by the government which relate to the environment should consider the way to relieve the financial burdens of consumer organisations when experiments and tests are necessary. At the same time, there should also be changes in the attitudes of business entities. It is hoped that even if test results of their own products were to indicate a poor quality or performance, they would accept this as an opportunity for improvement, rather than the current situation of attacking consumer organisations in relation to the test results.

#### Leadership training for next generations – Eco-leadership Camp

One of Consumers Korea’s focussing fields is education for next generations of consumers. Consumers Korea has been holding eco-leadership camps for the adolescents from all over the world regardless the economic development status of their countries who are over 13 years of age. The goals of the camp are to enable them to understand:

- the difference between ordinary consumption patterns and sustainable consumption patterns in everyday life,
- that problems may be caused by an individual's consumption,
- that international solidarity is necessary in order to solve issues relating to consumption.

Through this camp, the participants have an opportunity to recognise current environmental issues, and also secure the necessity of thinking with a globalised perspective. Likewise, although such camps play an important role for the next generations of consumers, Consumers Korea has experienced constant difficulty in raising adequate funds as the outcomes for the education for future generations are not visibly measurable.

#### **11.4 Future Tasks**

Voluntary consumer organisations work on consumer issues at both the domestic and international levels have evolved throughout the decades. For instance, consumer organisations have consented to concentrate on sustainable consumption as the main mechanism for encouraging consumption patterns and have acknowledged that economic efficiency cannot be a solution for the environmental crises. The sustainable consumption movement emphasises the responsibility of consumers and recognises the underlying causes of environmental degradation and ecosystem destruction as a direct result from insensible consumption.

While, in reality, consumer organisations actively work on the sustainable consumption movement, other social components such as industry, academia and government have been left behind and stagnated at the green products movement. From the consumer side, although they wish to purchase green products, they are practically suffering from lack of product variety and available stores. In order for sustainable consumption to be expanded, there needs to be understanding of and efforts for education for sustainable consumption by each social component and stakeholder. Industry should make efforts for sustainable production, and the government needs to consolidate current regulations and policies towards the direction of sustainable consumption. In addition, it is essential for academia to conduct further studies on relevant issues.

In conclusion, therefore, it is suggested that it is necessary to overcome the imbalance in recognition about green consumption between stakeholders and the existing gaps in implementation of education for sustainable consumption must be addressed in order for sustainable consumption to be achievable throughout the entire society.



## **SECTION III**

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## CHAPTER TWELVE

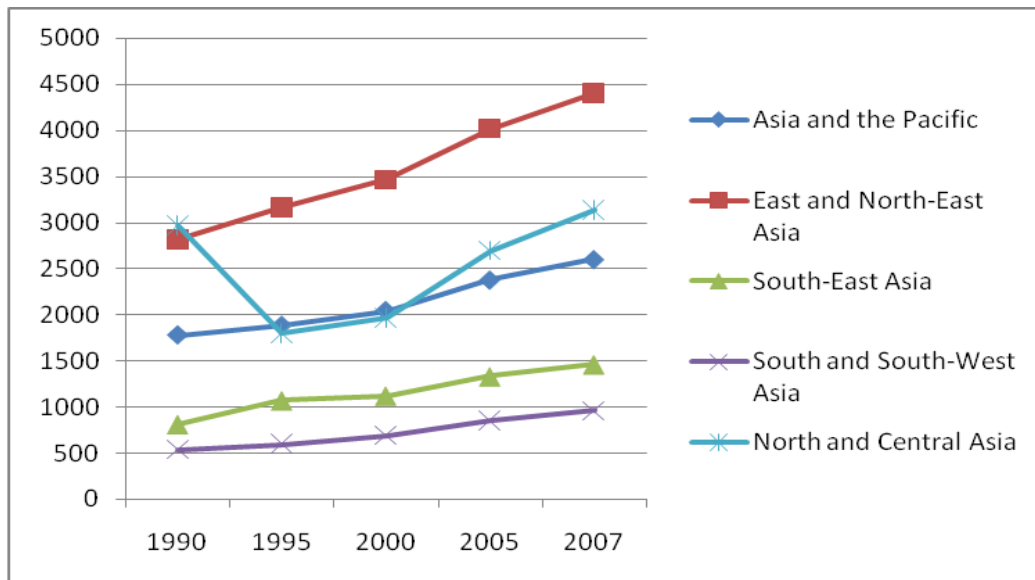
### PRACTICE CASES ON EDUCATION FOR SUSTAINABLE CONSUMPTION IN CHINA, JAPAN AND REPUBLIC OF KOREA

#### 12.1 Introduction: Background of the Country Case Studies

Asia and the Pacific had the fastest economic development regionally over the last two decades. This region achieved 5.8 % GDP growth and contributed 27.6 % of the global output in 2007 (UNESCAP, 2008). In particular, East and Northeast Asia (NEA) have maintained an accelerated economic growth amongst the sub-regions in Asia-Pacific since 1990 as demonstrated in Figure 12.1 below. For instance, the average GDP per capita of East and NEA in 2007 (4,405\$) was approximately 59% higher than the total average of Asia-Pacific (2,603\$). In practical terms, the GDP per capita of this sub-region was double the average of Asia-Pacific when we consider it in international PPP<sup>1</sup> dollars which “adjusts for purchasing power and eliminates the volatility caused by US \$ market exchange rate” (*Ibid.*, 2008: 98).

Acknowledging the rapid economic growth of East and NEA described above, this sub-region is significant in Sustainable Consumption and Production (SCP). Specifically, the NEA region has increasingly played an important role in SCP due to its rising energy consumption and the consequential impacts on climate change. In fact, the NEA region has three out of the top ten CO<sub>2</sub> national emitters due to either the robust economic growth or its advanced economic status i.e. China, Japan and Republic of Korea (ROK) at the rank of first, fifth and ninth respectively (*see Figure 12.2*).

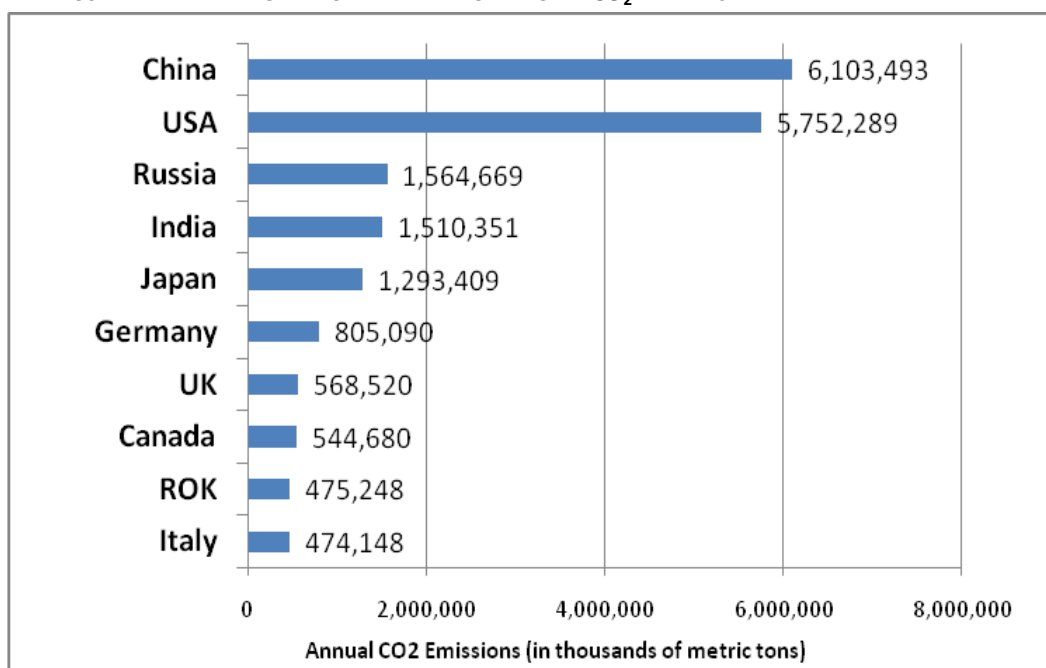
FIGURE 12.1 – GROWTH OF GDP PER CAPITA, ASIA REGION 1990 – 2007



(Source: UNESCAP, 2008)

<sup>1</sup> PPP: Purchasing Power Parity

FIGURE 12.2 – THE WORLD TOP TEN LEADING NATIONAL CO<sub>2</sub> EMITTERS



(Source: United Nations Statistics Division, Millennium Development Goals indicators, 2006)<sup>2</sup>

Meanwhile, although SCP has recently been given world-wide attention since the Marrakech 10-Year Programme Process Meeting (10FYP) held by UN-DESA and UNEP in 2008, actual national/regional achievements remain insignificant as shown in the short history of strategic policy development, especially in the NEA region. Furthermore, educational policy research evidences on how a nation or region can address SCP efficiently are almost absent not only in NEA but also world-wide in spite of the first international consensus on Education for Sustainable Consumption (ESC) being stressed almost two decades ago, i.e. since Rio Summit in 1992. It is therefore necessary to examine the current status of ESC policy and implementation in the NEA region, especially centred on these three significant countries, i.e. China, Japan and ROK. This country case study on strategic mechanisms for ESC is highly significant because of the dearth of relevant research fields and urgent needs from the policy arena in order to identify efficient practices.

From the country case study background within the specific contexts of ESC policy and practice in the Northeast Asia region, the consequential sections of this chapter aim to provide an understanding of a case study of the aforementioned three countries as follows:

- A synopsis of the three countries' context regarding ESC (*see 12.2 and Section 12.3*);
- The Analysis of the three country case studies centred on ESC policy and practice in China, Japan and Republic of Korea, especially commonalities and diversities of key findings on the primary mechanisms for ESC (*see 12.4 and 12.5*).

<sup>2</sup>United Nations Statistics Division, Millennium Development Goals indicators: data from 2006; internet: <http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=749&crd=>

## 12.2 Profile of the Selected Countries for Case Studies

The region of Northeast Asia is of particular significance in regards to sustainable consumption. It serves as the primary consumption hub throughout the greater Asia-Pacific region in both the production and consumption of value-added products. NEA has seen significant rises in advanced manufacturing and value-added production with these activities accounting for nearly 32% of the region's GDP (as of 2005) (IMF, May 2009: 2). In regards to consumption, Asia is also rising. Asia now accounts for 22.8% of global GDP, up from 7.1% just 30 years ago. The consumer class of Asia-Pacific totals over 500 million people and constitutes almost one third of the global consumer class (Gardner, 2004:7).

Though the consumer class in this region is now the world's largest, the regional economy still depends heavily on external demand. The recent global downturn thus had a doubly negative impact on the production sector in Asia by drastically reducing overseas demands for imports and resulting in a reduction in regional and national economic productivity. However, with the region contributing the biggest fiscal stimulus package, especially thanks to China's massive contribution, the economic rebound has been quicker and more dramatic than experts predicted while many traditionally high-consumption regions still face a downturn (The Economist, 30 Jul 2009). The powerful economies of Northeast Asia have the strength now not only to influence the overall Asia-Pacific regional economy but can also significantly influence economies in other regions. Though exact figures are not yet available, China is near the point or has achieved the status of being a net-provider of overseas development assistance (ODA) rather than a net-receiver. Coupled with Japan's history of ODA and the Republic of Korea's growing ODA, more ODA finances are now flowing out of Northeast Asia than are being given to the region (statistics used from: OECD, 2009 and Lum, et.al., Feb. 2009).

The three countries selected for case studies are the three most powerful consuming nations in Asia-Pacific. Japan is the second highest world contributor to GDP (in nominal terms), China is third, and the Republic of Korea is fifteenth (as of 2008). Together, these three countries contribute 16.9% of global GDP (IMF, internet: April 2009). These three countries have a significant opportunity to provide leadership in the Asia-Pacific region towards sustainable consumption. As the primary consuming nations in a region that is rapidly trying to emulate the consumption patterns lauded by Western high-consumption societies, these countries set the trends that will be followed throughout the region. If action is taken in these countries to secure sustainable consumption then it is likely these same patterns will be emulated throughout the region. Furthermore, as the primary producers of value-added items, these countries can encourage good practices in other Asian countries where primary materials are produced through a process of corporate sustainable responsibility from the parent companies in these three countries.

Japan, China and the Republic of Korea are all making considerable efforts to advance Sustainable Consumption and to educate consumers about the imperative for sustainable consumption and development. These efforts are relatively new in each of the three countries, and there has as of yet been little analysis of the affects these policies and actions have had. Work on green procurement is the most advanced activity by all three governments towards sustainable consumption, and has clearly resulted in the growth of the green market in each of these countries. Work on education for sustainable consumption is increasing in these countries, and more campaigns are being aimed directly at consumers. The model of "green schools" in China has also served as the stimulus for the

introduction of the “eco-schools” project in Thailand, so it is possible to acknowledge that these countries are already having an influence on sustainable practices and policy in other Asian countries.

### **12.2.1 Education Contexts**

#### **Japan:**

The Japanese government spends 9.8 % of the total government expenditure on public education, which is equal to 3.6% of the country’s GDP (data from 2004). This is roughly equivalent to \$131 billion USD per annum, or \$6,392 USD per pupil in primary and secondary education (UNESCAP, 2007: 75-86). The Japanese education system is well established at primary, secondary and university levels.

Japan has achieved a 99% literacy rate (CIA, internet: 2009). The average school life expectancy for students in Japan in 2005 was 14.7 years for girls and 15 years for boys (UNESCAP, 2007: 74). OECD’s Programme for International Student Assessment in 2006 ranked Japan sixth in Science, fifteenth in Reading, and tenth in Mathematics (OECD, 2007: 22-53). The enrolment ratio in tertiary education was 54% for Japan in 2004 (UNESCAP, 2007: 69).

#### **China:**

The government of China’s expenditure on public education is 12.7 % of the total government expenditure, which is equal to 2.2% of the country’s GDP (most recent data available from 1991). This is roughly equivalent to \$15.9 billion USD per annum, or \$99 USD per pupil in primary and secondary education (UNESCAP, 2007: 75-86). More recent figures suggest that though the government has set a target for educational expenditure equal to 4% of GDP, it still remains at 2.8% (as of 2004) (Mei and Weng, 2006: 13-4). However, with the increasing GDP in China, this would now equate to a total around \$48 billion USD per annum.

China has achieved a 90.9% literacy rate, though the gender divide is significant with 95.1% for males and 86.5% for females (CIA, internet: 2009). The average school life expectancy for students in China in 2005 was 11.1 years for girls and 11.2 years for boys (UNESCAP, 2007: 74). China has the lowest enrolment in tertiary education in the Northeast Asia region with a level of 19% enrolment ratio in 2004 (UNESCAP, 2007: 69).

#### **Republic of Korea:**

The government in the Republic of Korea’s expenditure on public education is 16.5% of the total government expenditure, which is equal to 4.6% of the country’s GDP (figures from 2004). This is roughly equivalent to \$27.3 billion USD per annum, or \$2,740 USD per pupil in primary and secondary education (UNESCAP, 2007: 75-86).

Literacy rate in the Republic of Korea is 97.9% (CIA, internet: 2009). The average school life expectancy for students in ROK in 2005 was 15.2 years for girls and 17.2 years for boys (UNESCAP, 2007: 74). OECD’s Programme for International Student Assessment in 2006 ranked the Republic of Korea eleventh in Science, first in Reading, and fourth in Mathematics. Students in ROK held an especially high understanding of Earth Systems science (OECD, 2007: 22-53). The Republic of Korea is also notable for the highest level of participation in tertiary education in all of the Asia-Pacific region with a level of 89% enrolment ratio in 2004 (UNESCAP, 2007: 69).

## 12.2.2 Sustainable Development Contexts

### Japan:

Japan is a highly developed country and advanced economic power. The country experienced rapid development and economic growth through the 1960s to 1980s. The 1990s saw a downturn in economic growth in Japan as the country's asset price bubble burst which lasted for a decade. By 2005, the Japanese economy was once again expanding at a rapid rate. The initial effects of the recent global credit crunch were weathered in Japan because the country's financial sector was not exposed to subprime mortgages. However after the sharp decrease in foreign demand for Japanese exports as other countries suffered the financial crisis, Japan too moved into recession in late 2008 (CIA, internet: 2009). Japan enjoys the third highest GDP (PPP) of any country (behind the United States and China), but in regards to per capita GDP (PPP) Japan is actually twenty-fourth among all countries (IMF<sub>2</sub>, internet: 2008). Japan has the eighth highest ranking of any country on the Human Development Index (HDI) (UNDP, 2008: 25). Japan also enjoys one of the most equal distributions of income in the world, as measured by Gini coefficient (although data for Japan comes from 1993) (UNDP, 2004: 188-91).

Long-term development concerns for Japan are the massive government debt (170% of GDP) and its aging population. A further problem is Japan's lack of valuable natural resources, thus the country must import most of its energy fuels and 60% of its food. Japan is also the fourth largest consuming nation of oil and electricity. The country is responsible for extremely high draws on the world's supplies of fish and tropical timber (CIA, internet: 2009). However, Japan receives a reasonably high score in the Environmental Performance Index (84.5) developed by Yale Center for Environmental Law and Policy gaining them a ranking of twenty-first among all nations (YCELP, 2008: 10).

Japan's recent history has seen direct competition between economic interests and environmental interests. Since the recognition of the pollution-based diseases such as the Minamata disease in the 1960s, a high-level of public awareness and connection between environmental and human health has been advanced in Japanese society. The formation of the Environmental Agency in Japan in 1971 marked a turning point in the approach the government would take towards the environment. Japan has become a strong proponent and international leader of sustainable development and greenhouse gas reductions having hosted the Kyoto Protocol conference and providing substantial financial support for the UN Decade of Education for Sustainable Development.

### China:

Based on World Bank classifications for country *Income Group* and measurements of GNI per capita (based on World Bank *Atlas method*), China is a Lower Middle Income country and achieved this ranking in 2001. If a continuation of current rates of growth is assumed, China will achieve the ranking of Upper Middle Income by 2012 (WB, Internet: 2009). The Chinese economy has been experiencing rapid growth for the past 30 years, with an average annual GDP growth rate of over 10%. China is one of the fastest growing economies in the world and contributes the second highest GDP (PPP) in the world or third highest in nominal terms. However, when measured by per capita GDP (PPP) it is still relatively low ranking as the hundredth country at \$5,970 (USD), only 17.5% of Japan's GDP (PPP) per capita (IMF<sub>2</sub>, internet: 2008).

The rising economy in China has also brought with it a rising consumer class. In 2000, there were 56 million people in China that were considered part of the global middle class, thus constituting 13% of

the global grouping. It is predicted that by 2030, China will contain 38% of the global middle class (Bussolo, et.al., 2008: 18). China is both a massive importer and exporter. Asian imports to China more than quadrupled between 2000 and 2008 in monetary terms (IMF<sub>1</sub>, May 2009: 3). While between 1985 and 2007, exports of goods and services rose from 10% to 43% of GDP (IMF<sub>2</sub>, internet: 2008).

While China is experiencing massive economic growth, the income distribution in the country is actually becoming more unequal. With the wealthy 10% receiving one third of all the country's income, China is within 80<sup>th</sup> percentile for inequality of income distribution, as measured by Gini coefficient (UNDP, 2004: 188-91). However the Gini coefficient does not properly account for the significant variations that exist in regional economies of China, and thus the number can be argued to be distorted. In comparison, a wealthy and populace province like Guangdong has a nominal GDP comparable to the country of Sweden, while the large, landlocked western province of Qinghai has a nominal GDP comparable with Senegal (Wikipedia, internet: 2009). Since the mid-1990s, the national government has also made substantial efforts to distribute a high amount of its expenditure through local governments (Li, ed., 2008: 7-4). The general increase in income, though not equally dispersed, did spur a 53% reduction in the proportion of population living in poverty between 1981 and 2001, the largest national reduction of poverty in the world (Ravallion and Chen, 2005: 3). Nonetheless, one tenth of China's population still lives below the income of \$1 USD per day (WB, internet: 2009).

China's rapid economic growth has brought with it a plethora of problems regarding pollution and environmental degradation. In 2006, Forbes magazine reported that the ten most polluted cities in the world were in China (Malone, 22 March 2006). The country is the world's second largest consumer of electricity and third largest consumer of oil, though it has achieved a significant increase in forest cover as part of their carbon offset projects (CIA, internet: 2009). China received an Environmental Performance Index score of 65.1 thus ranking it as the 105<sup>th</sup> country in this index scoring (YCELP, 2008: 10). The country is making efforts though to encourage and fund sustainable development initiatives including 8.75% of their four trillion yuan fiscal stimulus package being earmarked for such projects (Fu and Si: 27 November 2008).

### **Republic of Korea:**

The Republic of Korea achieved status as a High Income country in 2003, though its current GNI per capita is only 56% of that in Japan (WB, Internet: 2009). The economy of the Republic of Korea was the second fastest growing economy in the world between 1960 and 1990. In 2004, the country's nominal GDP crossed the trillion dollar mark and is now the 13<sup>th</sup> highest country GDP (PPP), though in per capita terms it ranks 33<sup>rd</sup> (IMF<sub>2</sub>, internet: 2008). The Republic of Korea gained membership to OECD in 1996. ROK's economic growth was coupled with rapid industrialisation, and it is now one of the major export nations in the world especially in high technologies (CIA, internet: 2009).

The economic advancement of the Republic of Korea has been well shared across its population and has resulted in a rapid increase in the standard of living in this country. The Republic of Korea currently ranks as the 25<sup>th</sup> highest country by the Human Development Index (UNDP, 2008: 25). The country also benefits from a relatively fair distribution of income (UNDP, 2004: 188-91). This has allowed for the recent rapid rise in services which now accounts for 68% of annual GDP and a lessened dependency on foreign exports (WB, Internet: 2009). One of the significant problems that



ROK faces is its high level of population density, and as Japan it too is facing concern over an aging population. The historical pressures of a densely populated peninsula have resulted in a severe impact on the domestic natural environment. However, since the 1960s ROK has made major reforestation efforts, especially in the unpopulated demilitarized zone. The Republic of Korea received an Environmental Performance Index score of 79.4 thus ranking it as the 51<sup>st</sup> country in this index scoring (YCELP, 2008: 10).

The recent focus on “Low Carbon, Green Growth” in the Republic of Korea is a substantial movement in the direction of promoting sustainable development. UN Secretary-General Ban Ki-moon lauded the approach being taken by the Republic of Korea as a model other countries can emulate. “Today’s financial crisis is not an excuse for inaction on climate change. To the contrary, it represents an unprecedented opportunity to redirect government stimulus packages into green energy options and to fundamentally retool our global economy so that long-term, sustainable growth is accessible for all” (Ban: 14 April 2009). The country’s Green New Deal will allocate \$39.3 billion USD over the next four years as both an attempt to stimulate the economy and to shift infrastructure and industry in Korea to pursue a more sustainable path. The work earmarked in this plan will improve energy efficiency, renewable power sources, river and water quality, and at the same time the hopes are that this work will also stimulate almost a million new jobs in the Republic of Korea (Moon: 4 June 2009).

**TABLE 12.1 – COMPARISON OF DEVELOPMENT CONTEXT IN THREE CASE COUNTRIES**

	<b>Income Group<sup>3</sup></b>	<b>GDP (Nominal)<sup>4</sup></b> Amount Country Rank (in Trillions of USD)		<b>GDP (PPP) per capita<sup>5</sup></b> Amount in USD   Country Rank		<b>Human Development Index<sup>6</sup></b> Score/Country Rank	<b>Environmental Performance Index<sup>7</sup></b> Score/Country Rank
<b>Japan</b>	High Income	\$4.91	2 <sup>nd</sup>	\$34,116	24 <sup>th</sup>	0.956 / 8 <sup>th</sup>	84.5 / 21 <sup>st</sup>
<b>Rep. of Korea</b>	High Income <i>Since 2003</i>	\$0.93	15 <sup>th</sup>	\$27,692	33 <sup>rd</sup>	0.928 / 25 <sup>th</sup>	79.4 / 51 <sup>st</sup>
<b>China</b>	Lower Middle <i>Since 2001</i>	\$4.33	3 <sup>rd</sup>	\$5,970	100 <sup>th</sup>	0.762 / 94 <sup>th</sup>	13.1 / 105 <sup>th</sup>

### 12.3 Overview of the Selected Practice Cases on Education for Sustainable Consumption

This section provides an overview of the selected Education for Sustainable Consumption (ESC) practice cases in China, Japan and Republic of Korea (ROK). The first following sub-section outlines the ESC case study selection criteria and its search method. The rest of the three sub-sections provide details of ESC practice cases selected for each country’s case study.

#### 12.3.1 Setting Criteria and Search Method

Five basic criterion were established in order to meet the aims for the case studies as shown in Table 12.2 below:

<sup>3</sup> World Bank classifications for country *Income Group* and measurements of GNI per capita (based on World Bank *Atlas method*); (WB, Internet: 2009).

<sup>4</sup> (IMF<sub>2</sub>, internet: 2008).

<sup>5</sup> (IMF<sub>2</sub>, internet: 2008).

<sup>6</sup> Potential Score is out of 1.0, Human Development Index (HDI) (UNDP, 2008: 25-8).

<sup>7</sup> Potential Score is out of 100, developed by Yale Center for Environmental Law and Policy (YCELP, 2008: 10).

**TABLE 12.2 – EDUCATION FOR SUSTAINABLE CONSUMPTION PRACTICE CASE SELECTION CRITERIA**

Selection Criteria		
1	Source	Independent empirical ESC practice cases reported not only in English but also in the selected countries' languages i.e. Chinese, Japanese and Korean
2	Geographical scope	Three selected countries in the Northeast region i.e. in China, Japan and ROK
3	Aims	To promote sustainable consumption by government cooperation/involvement
4	Target Group	Consumers who have purchasing power - over than 18 years old
5	Case running years	Running project in the current year, 2009

- *Criterion 1:* To begin with, independent ESC practice cases reported in English only were searched electronically via URL sources, in books and articles manually. This was because of pragmatic ground as English has the widest readership. However, only a few cases were found at the first search stage due to a short ESC history in both policy and research arenas in the Northeast region. The language criterion was therefore expanded to include the selected three countries' own languages i.e. Chinese, Japanese and Korean.
- *Criterion 2:* In line with the aims for these case studies, empirical ESC projects/initiatives only encompassed in China, Japan and ROK were explored;
- *Criterion 3:* The search for empirical ESC practice cases was limited within the specific aims that the practice case ultimately contributes to climate change mitigation via energy saving, resource management and changing consumption patterns. In addition, regarding the key question of this research established in Chapter 2 ("*What is the government's role in influencing consumer choice through ESC?*"), governmental cooperation and involvement in the ESC project/initiative was also considered as part of this criterion;
- *Criterion 4:* Only ESC practice cases targeting consumers who are over than 18 years old and have actual purchasing power were included. This criterion was based on a pragmatic reasoning that most college students start to have purchasing power in Asian countries although their careers have not started, and;
- *Criterion 5:* As another pragmatic reason, collection of projects and initiatives were limitedly to ones which were currently active. This was because it is not easy to find a report on ESC practice projects and initiatives with full details of the promotion process and thus to be able to collect further data on a given case.

The snowball process was adopted as an additional case selection method to allow "a process of reference from one person to the next" (Denscombe, 2003:16). This provided for a series of expert reviews regarding the analytical framework, the identification of assessment factors, and the selection of cases included in the original research schedule. For instance, a regional workshop on ESC in China, Japan and ROK was organised and resulted in collection of three policy reports and seven practice cases (see Choi, Tian and Didham, 2009 for the workshop proceedings). Based on a post-consultation sampling process of this workshop, nine cases were additionally selected in cooperation with ESC researchers and practitioners working in the field in China, Japan and ROK. As a result, three ESC policy reports and 16 ESC practice cases were incorporated into the country case study resources of this research (see Table 12.3 below).

### 12.3.2 Outline of the Selected Practice Cases

- In agreement with the selection criteria above, a total of eleven national ESC practice projects/initiatives were selected and explored as the key data for this three country case study. The details about individual cases are laid out in Table 12.3 below: five cases from China, three cases from Japan and three cases from ROK. As outlined in Table 12.3 below: The aims commonly identified across the selected cases are linked with climate change mitigation which is one of urgent environmental issue world-wide and focus on practical actions to address problems of food waste, natural resource management, energy efficiency, eco-labelling products, youth leadership and group education, etc.;
- Target groups are mainly general consumers and some youth groups;
- All of cases have implemented at a national level except for one Chinese case on reducing food waste (C5 in Shanghai only), and;
- It is noticeable that there is a wide-range of impletation year for the projects/initiatives across the three countries. For instance, one Korean case (K3 entitled Green Shop Movement) was set up in 1992 and has expanded its network across the country over the last two decades, while two Chinese cases were just implemented in 2009 (C4 and C5 entitled Energy-Saving Project and Reduction from Beginning respectively).

### 12.4 Main Findings: Assessment of Primary Mechanisms of Education for Sustainable Consumption

The critical literature review on Education for Sustainable Consumption (ESC) in Chapter Four, relating policy and research evidences, yielded a framework of primary mechanisms for promoting sustainable consumption through ESC. This framework was utilised for the analysis of the case studies and consisted of five structural components to these mechanisms entitled:

- 1) *Catalyzing Practice of Sustainable Consumption*– which is the overall strategic procedure critically affecting consumer behaviours by ensuring systems-connections between these mechanisms in order to catalyze practice of sustainable consumption;
- 2) *Promote Responsible Behaviour* – which is the developmental stages of change regarding a consumers' decision-making processes in purchasing actions;
- 3) *Develop Environmental Citizenship* – which are key focal points for ESC initiatives and the values that ultimately stimulate consumers to change purchasing patterns towards sustainable consumption;
- 4) *Influence Patterns of Consumption* – which are of the governmental instruments from a forced regulatory instrument to a voluntary cooperative instrument, and;
- 5) *Develop Infrastructure for Sustainable Consumption and Production* – which addresses the preconditioning drivers of consumption practices and aims at facilitating sustainable lifestyles (see Table 4.1 in Chapter Four for theoretical details of each mechanism).

**TABLE 12.3 – AN OUTLINE OF THE SELECTED ESC PRACTICE CASES**

Case	Title	Aims	Target Group	Scale	Running Years
<b>C1</b>	Green Campus Project	To save energy and resources efficiently through environmental management	College and University students (18-25years old)	Nation wide	Up to present since 2003
<b>C2</b>	Cool China <sup>8</sup>	To encourage the nation to save energy and resources	Households, Government and private sector employees	Nation wide	Up to present since 2006
<b>C3</b>	Tackling White Pollution	To reduce plastic bag usage for saving resources	Consumers	Nation wide	Up to present since 2008
<b>C4</b>	Energy-Saving Project	To promote purchase of energy-saving products	Consumers	Nation wide	Up to present since June 2009
<b>C5</b>	Reduction from Beginning	To reduce food wastes for sustainable consumption	General Citizens	Shanghai only	Up to present since Spring 2009
<b>J1</b>	Eco-Action Points	To reduce household greenhouse gas emissions	Consumers/ Home-owners	Nation wide	Up to present since 2008
<b>J2</b>	Team Minus 6%	To encourage teams or individuals to cut emissions by 6%	Team leaders and individuals	Nation wide and International network-linked	Up to present since 2005
<b>J3</b>	Green Purchasing Network	To provide information for consumer choice	Consumers	Nation wide	Up to present since 1996
<b>K1</b>	Half Waste Double Recycling	To reduce waste for efficient resource management	Consumers	Nation wide	Up to present since 2005
<b>K2</b>	Sustainable Consumption Campaign	To strengthen consumer choice and safety	Consumers and young people (13-19 years old)	Nation wide	Up to present since 1997
<b>K3</b>	Green Shop Movement	To support recycling campaign	Consumers	Nation wide	Up to present since 1992

N.B. - C1: Chinese Case 1; J1: Japanese Case 1; K1: Korean Case 1; D ISDC and SEP of the State Council: The Decision on Implementing the Science Development Concept and Strengthen the Environmental Protection of the State Council; LGP: Law of Government Procurement; ALEE: Administration to the Logo of Energy Effect (2004); Law on Energy Conservation (2007); GPN: Green Purchasing Network; METI: Ministry of Economy, Trade and Industry

<sup>8</sup> The title “Cool China” was re-set in 2009 based on “Temperature Setting Action” launched and implemented across the country since 2006.

The identified structural components of these five mechanisms of ESC provide a core understanding of what an effective ESC strategy/policy will address. Though this expands well beyond the traditional understanding of consumer education as mere information provision, it hopefully provides a holistic model that allows for more effective engenderment of consumers' proactive involvement in sustainable consumption. The three countries' selected ESC practice cases were analysed for their effectiveness based on an assessment of the level and depth to which they address each of the aggregate components of the five mechanisms. As a result, the primary mechanisms of strategic ESC are considered based on the critical elements of practice and procedure identified from the cases as explored in Section 12.4.1 to 12.4.5.

### 12.4.1 Systematic Development Towards Sustainable Consumption: Critical Elements of Procedure

Five procedural steps for advancing consumers' proactive practice of sustainable consumption were identified as aggregate components of the central mechanism "Catalyzing Practice of Sustainable Consumption": Enable, Encourage, Engage, Exemplify and Catalyse (*see also Table 12.4 below*):

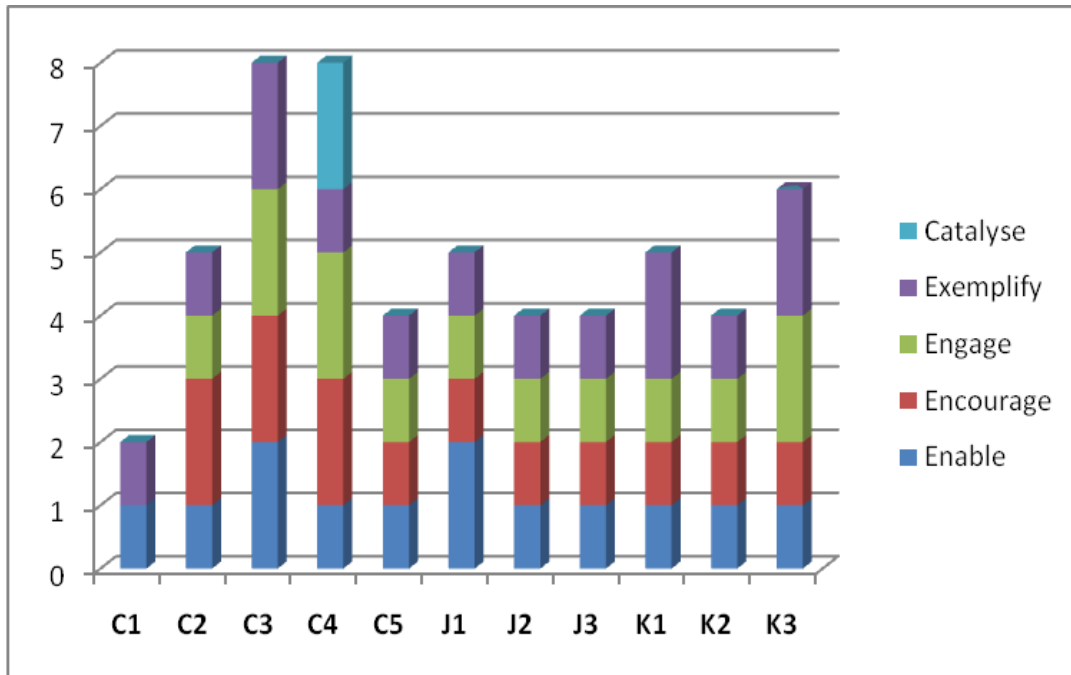
- Enable – Via removing barriers to sustainable consumption and developing a supportive infrastructure to enable individuals to practice sustainable consumption in daily life;
- Encourage – By rewarding good behaviour, penalising bad behaviour, and enforcing minimum standards through diverse approaches;
- Engage – Involve the public and stimulate community action: communicate and campaign, utilise media resources, and encourage participation in local policy formation;
- Exemplify – The government provides leadership by developing good practice and ensuring policy consistency, and;
- Catalyse – Building on the achievements of the other four components, make major shifts in social and cultural habits to engender a cultural paradigm grounded in sustainable practice.

**TABLE 12.4 – CRITICAL PROCEDURAL STEPS OF EDUCATION FOR SUSTAINABLE CONSUMPTION PRACTICE**

Procedural Step	Chinese Case					Japanese Case			Korean Case		
	C1	C2	C3	C4	C5	J1	J2	J3	K1	K2	K3
Enable	+	+	++	+	+	++	+	+	+	+	+
Encourage	-	++	++	++	+	+	+	+	+	+	+
Engage	-	+	++	++	+	+	+	+	+	+	++
Exemplify	+	+	++	+	+	+	+	+	++	+	++
Catalyse	-	NC	-	-	++	NC	NC	NC	-	-	-

N.B.: ++ = Strongly positive; + = positive; - = Unidentified; NC: Not Clear

**FIGURE 12.3 – DIVERSITY OF CRITICAL PROCEDURAL STEPS OF EDUCATION FOR SUSTAINABLE CONSUMPTION**



N.B.: Translated into figure scores based on Table 12.3 above; Score 3 = Identified with proven achievements; Score 2 = Identified with a descriptive report only; Score 1 = Unidentified; Score 0 = Not Clear

All procedural steps are key elements of systematic development towards sustainable consumption practice and are identified across the eleven ESC cases in China, Japan and ROK besides the stage entitled “Catalyse”. In addition, the four procedural steps “enable”, “encourage”, “engage” and “exemplify” are identified with no significant deviation between all eleven cases as shown in Figure 12.3 above. However, only one Chinese case (C5 entitled Reduction from Beginning) reaches the procedural step “Catalyse” which achieves social and cultural value changes (see case details below).

#### Tackling White Pollution (C3)

C3 which is a Chinese project entitled Tackling White Pollution shows the highest achievement in all procedural steps *i.e.* “enable”, “encourage”, “engage”, and “exemplify” besides the fifth one “catalyse”. The expression “White Pollution” phrased in the project slogan means “plastic shopping bags” which have become one of the major environmental pollutants in China. To reduce the use of plastic shopping bags, the General Office of the State Council passed a “Plastic Restriction Order” in 2008 and has encouraged people either to carry their own shopping bags from home or to buy degradable plastic bags although they have to pay a slightly higher cost than general plastic bags. To support this order, “Notice of Restricting the Production and Sales of Plastic Shopping Bags” and “Regulations of Payment on Plastic Shopping Bags in Retail Stores”<sup>9</sup> were established to forbid providing free plastic bags to customers in all supermarkets across the country from the June 2008.

One of the good practices of this project has been tackling excess use of plastic bags in Beijing City and demonstrates how the government policy can be implemented and penetrated into people’s daily lives. Beijing City has heavily applied a strategy of “at point-of-consumption advertisement” which distributes public notices on restriction of plastic bags inside supermarkets using leaflets or wall-posters. The city also distributes leaflets around shopping malls on information about the new

<sup>9</sup> See URL source for further details (In Chinese): [http://www.nanjing.gov.cn/gsgg/csgl/200805/t20080529\\_240028.htm](http://www.nanjing.gov.cn/gsgg/csgl/200805/t20080529_240028.htm)

regulations with diverse slogan catch phrases: “The number of plastic bags is enough to destroy our earth”; “Away from plastic bags, away from white pollution”; “Pay for the bags, pay attention to the environment”; “One less plastic bag every day, all join the environment protection”, “Pay for the plastic bags, save resources, establish a environmental friendly society”. Noticeably, Beijing City requires all shopping departments placing electric screens and banners to recall the city’s slogans for plastic bag restriction for consumer viewing. Beijing City also requires shopping departments that use diverse mass-media such as radio, newspaper and TV to participate in creating environmental protection atmosphere.

One example of the strategy of Tackling White Pollution is implemented under the slogan “Green Beijing”<sup>10</sup> sponsored by Green Earth Volunteers, China Brand Agriculture Web, China Quality Mobile Newspaper, Tencent group and Beijing Wumei group. Green Beijing aims at distributing ten million eco-friendly reusable shopping bags and attract ten million family members to the green consuming project. Wumei supermarket, which is one of Green Beijing sponsors, has already dispatched one million eco-friendly reusable shopping bags to its customers. As shown in the Beijing City case, the project Tackling White Pollution has reached a remarkable achievement through private sectors’ cooperation and consumers’ actual action resulting in reducing plastic bag uses in a short period of time since its launch in 2008. For instance, according to China Chain Operation Association<sup>11</sup> the average use ratio of plastic bags has declined 66% in the supermarkets across the country which means a reduction of 40 billion plastic bags and approximately saving 1.6 million tons of petroleum.

#### Reduction from Beginning (C5)

Regarding the procedural step “Catalyse”, C3 entitled “Reduction from Beginning”<sup>12, 13</sup> is a unique case across all eleven cases as it is the only proven project which tackles social and cultural values for sustainable practice. China is one of countries well-known for its rich food culture. In addition, Chinese traditional habit is to order excessive foods when they show hospitality and generosity to visitors and friends. Coupled with the recent economic growth, this practice has consequently resulted in a major food waste issue across the country. In particular, there is a current cultural habit that people consider asking for a doggy bag to take away left-over food from a restaurant as a symbol of being impoverished.

To tackle this cultural food habit, Shanghai Bureau of Waste Management and Shanghai Restaurants Association started a public campaign with the slogan “Reduction from Beginning” since April 2009. Notices and posters have been placed on walls and tables of restaurants in order to educate customers about environmental issues and to encourage them not to order excessive foods. To reward customers, 15% of the total restaurant bill is discounted when the customer has unfinished food packaged to take away. Restaurants also have benefits when they join this campaign through reduction of food waste disposal costs from Shanghai Bureau of Waste Management. Although this campaign has been implemented for a short period of time, 10% of Shanghai Restaurants Association members have already joined and the numbers are continuously increasing due to both parties’ benefits (i.e. customers and restaurants).

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<sup>10</sup> See URL source for further details and achievements (In Chinese): <http://finance.sina.com.cn/g/20080526/15164910863.shtml>

<sup>11</sup> See URL source for further details and achievements (In Chinese): <http://news.sohu.com/20090525/n264141006.shtml>

<sup>12</sup> See URL source for further details (In Chinese):

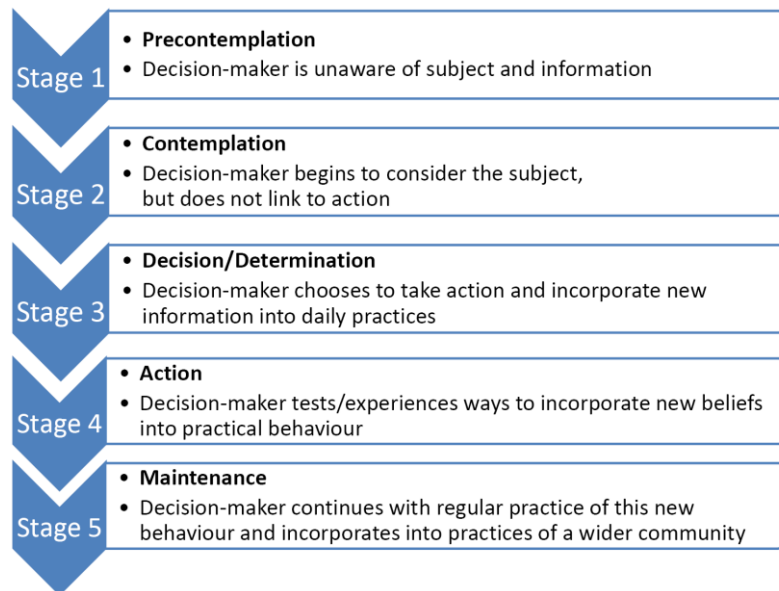
<http://www.shanghai.gov.cn/shanghai/node2314/node2315/node4411/userobject21ai333150.html>

<sup>13</sup> See URL source for further details (In Chinese): [http://news.xinhuanet.com/environment/2009-04/22/content\\_11231053.htm](http://news.xinhuanet.com/environment/2009-04/22/content_11231053.htm)

## 12.4.2 Encouraging Responsible Behaviour: Stages of change in a decision-maker's practices

Five hierarchical stages of change in a decision-maker's consumption practices emerged from the critical review as explained in Chapter Four (see Figure 12.4 below for details).

FIGURE 12.4 – FIVE STAGES OF CHANGE IN A DECISION-MAKER'S CONSUMPTION PRACTICES



The eleven selected ESC practice cases were examined based on the definition of each stage of encouraging decision-makers' change in consumption behaviour and resulted in two significant indications (see Table 12.5 for each case evaluation):

- All cases reached the third stage of decision/determination and showed individual choice for action, with eight out of eleven cases clearly demonstrating this achievement;
- Regarding the fourth stage (Action) and the final stage (Maintenance), diverse development stages were indicated. For instance, only one case (K3 which is a Korean case entitled Green Shop Movement) had identifiable proven achievements on supporting new action based on the new belief developed throughout the previous three stages and finally reaching the final stage "maintenance". In addition, , all three Japanese cases reached the final stage of "Maintenance", whilst none of Chinese cases indicated it, and;
- The Korean Green Shop Movement (K3) and its proven achievement story is significant in learning about how ESC initiatives influence individuals' beliefs and their following action for practice of sustainability. A brief history and proven evidences of each stage are introduced shortly.



**TABLE 12.5 – FIVE STAGES OF CHANGE IN A DECISION-MAKERS’ CONSUMPTION PRACTICES**

Stage	Chinese Case					Japanese Case			Korean Case		
	C1	C2	C3	C4	C5	J1	J2	J3	K1	K2	K3
Precontemplation	+	+	+	+	+	+	+	+	+	+	+
Contemplation	+	+	+	+	+	+	+	+	+	+	+
Decision/Determination	+	+	+	+	+	+	+	+	+	+	+
Action	NC	+	+	+	+	+	+	+	NC	NC	++
Maintenance	-	-	-	NC	NC	++	+	+	+	NC	++

N.B.: ++ = Strongly positive; + = positive; - = Unidentified; NC: Not Clear

### Eco-Action Point Programme (J1)

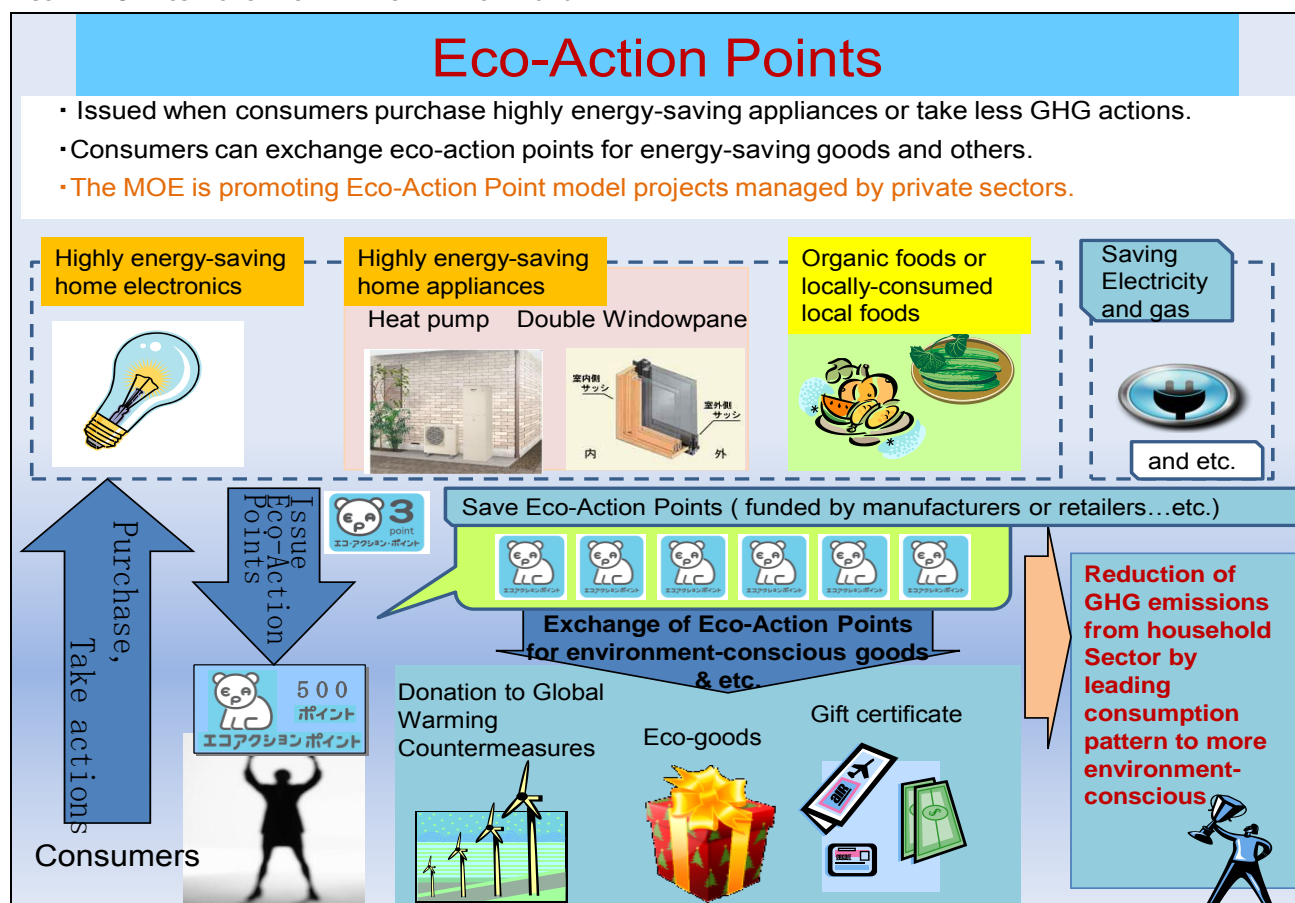
Greenhouse Gas (GHG) emitted from households in Japan in 2007 was 41% increased (2.33 million tons) as compared to FY1990<sup>14</sup>. To respond to the urgent needs for reducing household GHG emissions at the national level, The Ministry of Environment of Japan (MOEJ) launched Eco-Action Point Model Project in 2008 in collaboration with the Ministry of Economy, Trade and Industry. The MOEJ has promoted this Eco-Action Point Programme (EAPP) as a national movement to encourage public consumers, especially regarding the household sector. One of EAPP aims is to promote the revitalisation of the economy while reducing CO<sub>2</sub> emissions by accelerating purchases of energy-saving home appliances with this scheme. The basic concept of EAPP then was put into “The Innovation for Green Economy and Society” which was announced by the MOEJ aiming at a “low carbon society”, a “sound material-cycle society” and a “society in harmony with nature” which has gained strong momentum since its launch in April 2009.

The EAPP is a good national case showing active cooperation amongst government, industry and public sectors. For instance, the government first selected some model projects initiated by private companies, NGOs and local institutions. By promoting organisations to produce eco-friendly products or services, consumers obtain Eco-Action Points and can exchange them for various commodities and electronic money whenever they buy those products or services. As a result, consumers not only can contribute to reducing GHG but also get financial benefits along with their various consumption choices (see Figure 12.5 below). In particular, EAPP encourages consumers’ purchasing patterns and strengthens their decision-making empowerments. Current achievements of the EAPP, according to the MOEJ (9 Oct. 2009) direct provision of information to IGES, approximately 180 companies and 170,000 people joined the project in FY2008 across the country. Under the EAPP promotion scheme:

[C]onsumers choosing energy-saving products or less GHG service obtain Eco-Action Points presented by manufacturers, distributors or retailers. In a certain amount, those points can be exchanged for various eco-goods or gift certificates, etc. In this sense, Eco-Action points are economic incentives to shift people’s consumption patterns, as well as the sales promotion tools funded by private companies. The Ministry of Environment shows the general idea of what kinds of products or services are suitable to Eco-Action Point, and those products and services are marketed with a single logo. So, we support the start-up of model projects and their public relation activities, but expect these projects will be self-supporting in near future (based on direct information from The Ministry of Environment of Japan, 9 Oct. 2009).

<sup>14</sup> <http://www.env.go.jp/en/focus/attach/090318-a1.pdf>

FIGURE 12.5 – ECO-ACTION POINT NATIONAL MECHANISMS



(Provided by The Ministry of Environment of Japan on the 9<sup>th</sup> October, 2009)

### Green Shop Movement (K3) <sup>15</sup>

The first movement was started in the city of Gwacheon, Korea in 1992 for resource management and environmental protection by encouraging citizens' sustainable consumption pattern. It is noticeable that this movement was triggered by community members, not initiated by government, and resulted in opening a shop titled "Green Shop". The original aim of this shop was to encourage citizens' participation in exchanging daily life items which they did not use anymore but that were still in good condition for the purpose of practicing sustainable consumption in their daily life. This movement received a great sensation not only from the community members but also the local government as it showed how an ordinary citizen can incorporate new beliefs regarding consumption into practical behaviour.

As a result, Gwacheon City started to support this Green Shop movement to set up an official office to replicate their achievements in other cities. By supporting governmental agencies and citizen organisations, this Green Shop network has expanded its network with 55 Green Shops running in different provinces across the country in 2009. It is also notable that an education programme is firstly provided to community members whenever Green Shops open in a new city or province in order to increase their awareness and knowledge towards sustainable consumption and enable them to take actual action. This expanded education-oriented activity indicates an evolution of the

<sup>15</sup> [http://greenshop.or.kr/sub01\\_1.html](http://greenshop.or.kr/sub01_1.html)

Green Shop goals over the last two decades from simple recycling or energy saving activities into creating a culture of sustainable community living.

Meanwhile, regarding the last stage of the Five Stages of Behavioural Change, i.e. maintenance, the main web-site of Green Shop Movement shares information and experiences to facilitate sustainable citizen's donations and activities. In addition, many of the reports and online dialogues on the Green Shop Movement web-site indicates communicating with and contributing to a local community as a key factor for achieving maintenance:

According to Suwon-City, the Beautiful Green Shop has raised 19,400,000 Won and provided student grants to 28 local students [...] especially the Green Shop has continuously done various social service activities participated by local volunteers. For example, the Green Shop membership provides services, food, and daily necessities twice a week to local elderly people who live alone or in poor living conditions [...] The Green Shop membership also runs a "Green Farm Sharing Happiness" and donate products to social welfare facilities [...] Impressed with the Green Shop Movement memberships' activities, Ms. Chu, S. H. who is a local resident provides constant student scholarships and donations [...] The local authority says that we are considering to build an independent department to deal with the Green Shop as its scale is getting bigger and bigger. I am deeply thankful for all these volunteers' activities without any material compensation (based on a report on the web-site of the Green Shop Movement - accessed on the 11 December 2009).

#### **12.4.3 Effective Value Promotion: Focal Points of Consumer Education Initiatives**

As explored in Chapter Four, the literature review on ESC revealed that certain values play key roles in consumer education achieving proactive participation in sustainable consumption:

- Pro-environmental values – which is a personal belief in the importance of environmental protection;
- Individual empowerment – which is referred to in this analysis as an engendering of an individuals' social engagement in actual actions or relevant processes which contribute to sustainable consumption;
- Responsibility – which is a sense of environmental citizenship and duty for sustainable consumption;
- Simple actions – which recognises that small individual actions can make big impacts on solving environmental problems, especially to achieve sustainable consumption and society, and;
- Future vision – which inspires individuals/community/society to achieve a sustainable society together and a clear idea that positive changes are possible.

The selected eleven cases were explored regarding these five values and indicated that:

- Pro-environmental Values - is demonstrated as a fundamental value underpinning development of individual empowerment in sustainable consumption;
- Individual Empowerment - appears to enable individuals to actualise their belief to contribute to sustainable consumption through diverse action approaches;
- Responsibility - the importance of citizenship and duty for achieving sustainable society together was emphasised in five out of the eleven ESC practice cases. Noticeably, only one case both in China (C2) and one in ROK (K3) stressed the significance of this focal point in the process of actual implementation, whilst it was applied in all three Japanese cases;

- Simple Action – was identified in five out of the eleven cases. In particular, the Chinese cases strongly applied simple action to encourage people to take action in their daily life as shown in C2 (no less or more than recommended temperature in the use of air conditioning), C3 (less use of plastic shopping bag), and C5 (packing unfinished food in restaurant), whilst none of the selected Japanese cases incorporated this value, and;
- Future Vision - was clearly encompassed in two Japanese cases only, J2 and J3 entitled Green Explorer and Green Purchasing Network. It is distinguishable that none of the Chinese and Korean cases clearly demonstrated Future Vision which oriented engaged individuals towards a sustainable society (see Table 12.7 below for evaluation of effective value promotions).

**TABLE 12.6 – EFFECTIVE VALUE PROMOTIONS**

Stage	Chinese Case					Japanese Case			Korean Case		
	C1	C2	C3	C4	C5	J1	J2	J3	K1	K2	K3
Pro-environmental Values	+	+	+	+	+	+	+	+	+	+	+
Individual Empowerment	+	+	+	+	+	+	+	+	+	+	+
Responsibility	-	+	-	-	-	+	+	+	-	-	++
Simple actions	-	++	++	-	++	NC	NC	NC	++	NC	+
Future vision	NC	-	-	-	-	+	+	+	NC	NC	+

N.B.: ++ = Strongly positive; + = positive; - = Unidentified; NC: Not Clear

#### An Example of Simple Actions: Cool China (C2)<sup>16</sup>

Energy consumption is a serious national issue in China. In fact, China recorded the highest growth rate in energy consumption per capita over the last seven years (6.8 % during 2000-2007) throughout Asia and the Pacific (UNESCAP, 2008: 203). In particular, household electricity consumption per capita steadily increased since the 1990s: A total of 10.3% (i.e. 215 Kilowatt-hours per capita) was increased during 2000-2005 and this is more than double than average growth rate in Asia-Pacific (4.3%). Furthermore, the Chinese government became increasingly aware of their significant education role regarding public energy use. This is because of the residential energy use at the national level is a significant percentage in comparison with other sectors such as industry (48.3%) and transport (10.5%).

To respond to the urgent national request for energy saving, the Cool China project was set up in August 2006, originally entitled “Control the Temperature in Public Building”, and recently strengthened its action nationally by State Council of China regarding the energy-saving policy. The government encourages all government and office workers to set air conditioners’ temperature at or above 26 degrees Celsius in summer time and at or below 20 degrees Celsius in winter time. Since this movement has expanded across the country entitled as “Cool China”, all public people are now encouraged to take this simple action at home. This will counter the fact that the energy supply cannot meet the demand, especially during the summer time in China because of the air conditioner usage. In some cities, the air conditioners consume a third of the electricity capacity during peak hours.

<sup>16</sup> Based on URL Source: [http://www.gov.cn/zwggk/2006-08/23/content\\_368136.htm](http://www.gov.cn/zwggk/2006-08/23/content_368136.htm)

Meanwhile, regarding Cool China implementation in government and private office buildings are stricter under the government supervision, i.e. State Department, than households. The State Department set a national system for Cool China and distributes the temperature control instructions along with its agenda to all supervising units across the country. Then the units carry out their supervising responsibility to check action in government and private office buildings and to encourage public participation in this simple action. In particular, it is notable that Cool China is supported by a strong legal action by the government as shown by its penalty when government, private offices, hotels supermarket, etc. do not follow their guidance. To support these supervising units, the government also exploits the media by introducing good practice cases to public. As an example of recent results, the Energy Saving Supervising Department in HiNan Province inspected Cool China performance at shopping malls in Hikou City and found that there was a 90% achievement of the Cool China targets.

*An Example of Future Vision: Team Minus 6% (J2)*<sup>17</sup>

The Japanese government established a national project entitled “Team Minus 6%” in 2005 which is aiming at 6% reduction of greenhouse gas emissions to mitigate against global warming as an international commitment to Kyoto Protocol. In consideration of the significance of global warming which impacts on socio-economic and public activities, this national project targets not only organisations including government and business sectors but also individuals, i.e. citizens. Therefore the Team Minus 6% ultimate goal is every citizen’s engagement and various civic actors’ collaboration.

The Team Minus 6% is a national project which strongly reflects the Japanese government’s vision for achieving low-carbon society entitled “The Innovation for Green Economy and Society” within the same context of the other national project “Eco-Action Point” introduced in Section 12.4.2 above. By orienting people with a clear vision and encouraging them to take simple actions, the Team Minus 6% has shown a great success in spite of its short history in Japan.

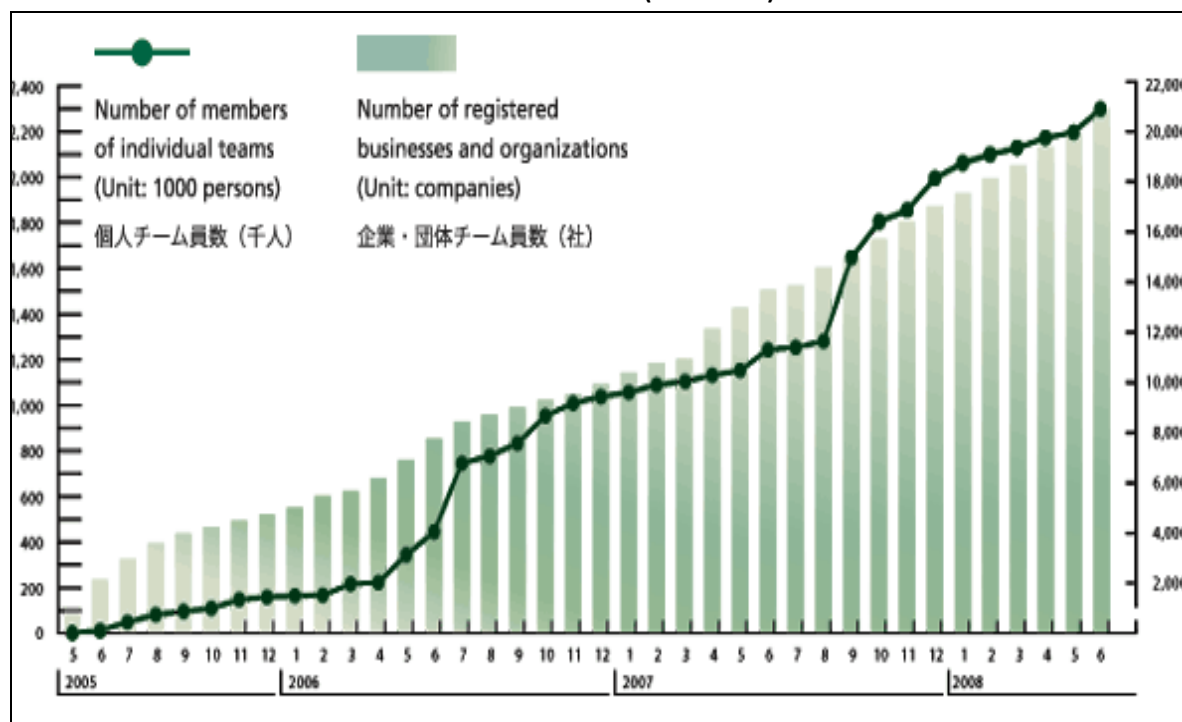
The Team Minus 6% runs a membership joined by individual and business teams. An individual team unit consists of 1,000 persons and a business unit is based on its organisational member scale. All individual and business units are coordinated by a leader under the national team leader: an official national leader is the Prime Minister and the sub-leader is the Minister of the Environment. As a result, a total of 2,302,513 individual teams and 21,795 business/civil groups have joined Team Minus 6% since its establishment in 2005 up to 2008 (see Figure 12.6 below). In particular, to achieve the goals of the Team Minus 6%, there are six actions for CO<sub>2</sub> reduction. To support these six actions, the Japanese government have encouraged people to join the teams through campaign and by providing relevant information through an official web-page:

- Set Air Conditioners
- Turn Off The Faucet
- Drive Your Car More Efficiently
- Choose Eco-Friendly Products
- Say No To Excessive Packaging
- Unplug Electric Appliances When Not in Use

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<sup>17</sup> URL Source: <http://www.team-6.jp/english/about.html>

FIGURE 12.6 – TOTAL NUMBERS OF MEMBERS OF TEAM MINUS 6% (2005-2008)



<http://www.team-jp/english/about.html>

#### 12.4.4 Efficient Tools and Instruments: Influencing Patterns of Consumption

As discussed in the analysis framework of this study, the fourth mechanism of Education for Sustainable Consumption is Influence Patterns of Consumption and consists of aggregate criteria based on the five different instruments types available to governments to encourage SCP. As shown in the following Table 12.7, it was possible to identify each instrument used to encourage people to participate in environmental action across the analysed cases. Nevertheless, the impact level of these instruments was not possible to measure with the limited data resources besides recent statistical achievements mostly proven by a total of joining members/teams/organisations of environmental action (see Table 12.8).

TABLE 12.7 – EFFICIENT TOOLS AND INSTRUMENTS

Instruments (Applied tools)	Chinese Case					Japanese Case			Korean Case		
	C1	C2	C3	C4	C5	J1	J2	J3	K1	K2	K3
Regulatory instruments (negative tax and penalty)	-	++	++	-	-	-	NA	++	++	-	-
Economic instruments (positive tax and subsidy)	-	-	+	+	++	-	NA	++	+	-	+
Educational instruments (research, training and public education programme)	+	+	-	-	-	+	++	-	+	+	++
Cooperative instruments (network or membership)	+	+	+	-	++	-	+	+	-	+	+
Informational Instruments (eco-labelling and mass-media)	-	++	++	+	+	+	++	+	++	++	+

N.B.: ++ = Strongly positive; + = positive; - = Unidentified; NC: Not Clear; NA: Not Applicable

### Regulatory instruments

Regulatory instruments are standards which reinforce individuals' or organisations' environmental practice and action by applying some type of government regulation; such as policy, act or law. Four out of eleven cases (C2, C3, J3 and K1) have strongly regulated environmental practice by policy, act or law across the cases. These four cases applied a restrictive national standard, negative taxing or penalty resulting in proven achievements. The relevant or supporting policies, acts and laws along with details are introduced in the following Table 12.8. Positive taxing and subsidy which promotes economic drivers are applied in the next instrument entitled "economic instruments".

### Economic instruments

Economic instruments mostly aim at influencing people's consumption decisions. Several cases have used government taxing and subsidy schemes to encourage consumers' purchasing choice as shown in those cases such as C3, C4, C5, J3, K1 and K3. Meanwhile, from the six consultancies of this report (Chapter Six to Eleven on ESC policy and practice in China, Japan and Republic of Korea), government procurement policy was commonly found as a national tool across the three countries to encourage industry sectors to produce green products. Those reports also stress that government green procurement ultimately supports consumers' diverse choice in purchasing green products with low price and good quality. In fact, all three countries have independent green procurement systems which have applied procurement standards for central and local governmental agencies based on Green Product Promotion Law. Nevertheless, it was not clear how the green procurement system has actually influenced individuals' purchasing decisions within the eleven case data of this study.

### Educational instruments

The literature review of this study defined a range of "educational instruments" including training, public education and research, while also highlighting the importance of participatory learning methodologies and critical analysis techniques for empowering consumers' proactive participation in sustainable consumption. Based on this defined category, only educational programmes organized by central/local governments, universities and NGOs were counted in this study. As a result, seven out of eleven cases (C1, C2, J1, J2, K1, K2 and K3) were identified with educational instruments as shown in Table 12.7 above.

In fact, there are diverse educational tools such as courses, programmes, campaigns and mass-media to raise individuals and organisations' environmental awareness, change attitudes and behaviour, especially regarding sustainable consumption. The case analysis shows that all eleven cases have strongly applied diverse campaigns and mass-media across the three countries, especially targeting the public. In addition, the case analysis also indicates the significant role in education to get voluntary agreements from individuals, organisations, and communities to bring a synergy effect in actual practice as shown in the following two stories – the first is extracted from K3 (Green Shop Movement) from the Republic of Korea and the second is a brief introduction of C1 (Green Campus Project) from China:

#### *K3 (Green Shop Movement)*

"We always organise and provide a programme which introduce what Green Shops are...prior to opening a Green Shop in a new city or province... why we need it and what we can do. ...Without their full understanding of why we need to be careful to consume products and how we need to reuse or recycle them, we cannot expect efficient and successful stories" (from the *Green Shop Movement* website – accessed 20 October 2009).

### *C1 (Green School Programme: GSP)*

GSP is promoted by Environmental Education and Communication Centre of the Ministry of Environmental Protection of China in success since it was initiated in cooperation with Deutsche Gesellschaft für Technische Zusammenarbeit in 2003 (see *Chapter Nine for a report on sustainable consumption of Green Schools in China for proven achievements including statistical evidences*). GSP originally targeted primary and secondary school students during the first several years; however college and university students became increasingly one of main target groups over the last few years. The main aims of Green Campus Project (GCP) is to provide the concept of sustainable lifestyles regarding these young leader's sustainable consumption patterns and efficient resource management within the college/university campuses in their everyday lives. One of rationales of this new target of GSP entitled Green Campus Project is the government's high attention to their significant empowerment in consideration of both their environmental leadership roles in Chinese Society for sustainable development and also their potential sustainable consumption power in the near future.

Meanwhile, China achieved "25.7% of tertiary school-aged children" in 2006 (UNESCAP, 2008: 83)<sup>18</sup>. Although this gross enrolment ratio in tertiary education is a significant improvement in consideration of its rate which was just 6.4% only in 1999, this group is still a smaller population in comparison with those in Japan (57.3%) and ROK (92.6%). In addition, "the average Chinese adult have had just six years of schooling [and] nearly two thirds of Chinese still live in rural areas with per capita incomes averaging less than \$1,000 per year" according to one of recent statistical figures (Worldwatch Institute, 2006: 8).<sup>19</sup>

In consideration of this education benefit for the young leaders at colleges and universities, this group is a potential middle and high-income group which will become a major consumers just a few years after their college/university degrees. Furthermore, this target group also has high significance in the global middle class in the near future when we consider the Chinese contribution was 13.5% amongst 56 million world-wide and is expected to be 38% of 361 million by 2030 (UNU, 2008)<sup>20</sup>. The government's attention to the significance of the young leaders is notable due to this background. In fact, this target group is becoming more important along with the world-wide interests as shown in "YouthXChange"<sup>21</sup> which has been implemented in many countries as a cooperative project jointed by UNESCO and UNEP. YouthXchange targets 15-24 years old people, and its tool kit was translated into Chinese and distributed to the Green School Projects including the Green Campus Projects since 2005.

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<sup>18</sup> UNESCAP (2008) Statistical Yearbook for Asia and the Pacific, Thailand: United Nations Economic and Social Commission for Asia and the Pacific; Also available at <http://www.unescap.org/STAT/data/syb2008/ESCAP-syb2008.pdf>

<sup>19</sup> The Worldwatch Institute (2006) State of the World - Special Focus: China and India, Washington: The Worldwatch Institute.

<sup>20</sup> United Nations University (2008) Global Growth and Distribution: Are China and India Reshaping the World?, Helsinki: UNEU-WIDER.

<sup>21</sup> See URL Source for details (In Chinese): [http://www.youthxchange.net/download/guidechapters/YXC\\_guide2007\\_01\\_project-4th.pdf](http://www.youthxchange.net/download/guidechapters/YXC_guide2007_01_project-4th.pdf)



### Cooperative instruments

As introduced in Chapter Four, cooperative instruments are becoming more common and encourage voluntary agreements from diverse sectors to cooperate with the government environmental policy direction towards the low-carbon and sustainable society. The case analysis shows three different groups' cooperation:

- University Cooperation – One case, C1 (Green Campus Project), established a Chinese university network consisting of volunteer memberships for sustainable consumption targeting university community members including students, lecturers and administrative staffs;
- Commercial Business Sector Cooperation – Three cases, C2 (Cool China), C3 (Tackling White Pollution) and C5 (Reduction from Beginning), demonstrate close cooperation between government and commercial business to provide/promote consumers' environmental decisions in purchasing choices, and;
- Industry Cooperation – Six cases, C4 (Energy-Saving Project), J1 (Eco-Action Points), J2 (Team Minus 6%), J3 (Green Purchasing Network) and K2 (Sustainable Consumption Campaign) and K3 (Green Shop) demonstrate that industry agreements can take a key role in providing diverse eco, environmentally-friendly, and green-products.

### Informational instruments

All examined cases beside C1 (Green Campus Project) used campaigns and mass-media to provide information about how individuals and organisations can join these environmental movements and take sustainable consumption action in their daily lives. In particular, all five Chinese cases report high usage of mass-media publicity including information leaflets, newspapers and TV advertisements to encourage people's sustainable consumption. It is noticeable that all these cases besides C5 (Reduction from Beginning) have opened official web-sites to distribute information, guidance, and practice manuals. Regarding product information including energy-efficiency and environmental impacts, eco-labelling is commonly used as an informational instrument. As introduced in the previous chapters on ESC policy and implementation in China, Japan and Republic of Korea (Chapter Six to Eleven), eco-labelling product systems in Japan and Republic of Korea have developed noticeably over the last several years, however it is still a challenge in China because of the limited numbers of eco-labelled products due to its short history. However, as with the analysis of Economic Instruments, it was not possible to clearly assess how effective eco-labelling systems are in influencing consumers' purchasing decisions from the eleven case data resources of this study.

**TABLE 12.8 – DIVERSITY OF REGULATORY AND ECONOMIC INSTRUMENTS**

Case	Title	Regulatory Instruments	Supporting Policy/Action	Sponsored/Cooperated By	Achievement Indicators
C1	Green Campus Project	-	DISDC and SEP of the State Council (2005)	State Council and Ministry of Environmental Protection	Joined university members
C2	Cool China <sup>22</sup>	-	Made by the State for Energy-saving (2006)	State Council and Ministry of Environmental Protection	Percentage passing inspection
C3	Tackling White Pollution	Negative Taxing/ Penalty	Plastic Restriction Order (2008)	General Office of the State Council	Average use ratio of plastic bags
C4	Energy-Saving Project	Restricted National Standard	LGP (2002), ALEF (2004), LEC (2007)	Ministry of Finance People's Republic of China	Sales of energy-saving products
C5	Reduction from Beginning	-	Not clear	Shanghai Bureau of Waste Management and Shanghai Restaurants Association	Joined restaurant numbers
J1	Eco-Action Point	-	In progress (by Ministry of Environment)	Ministry of Environment	Total number of participants
J2	Team Minus 6%	-	Kyoto Protocol and Japanese Commitment	Ministry of Environment	Total number of units and organisations
J3	Green Purchasing Network	Restricted National Standard	Green Purchasing Law (2000)	GPN, METI, Ministry of Environment	Total number of members
K1	Half Waste Double Recycling	Negative Taxing/ Penalty	Waste Measured Rate System (1995)	Korea Zero Waste Movement and Ministry of Environment	NC
K2	Sustainable Consumption Campaign	-	Basic Law for Consumers (1980)	Consumers Korea and Ministry of Environment	NC
K3	Green Shop Movement	-	Law for Resource Saving and Recycling (1992)	Green Shop Network and local government agencies <sup>23</sup>	Increased number of Green Shops

N.B. – D ISDC and SEP of the State Council: The Decision on Implementing the Science Development Concept and Strengthen the Environmental Protection of the State Council; LGP: Law of Government Procurement; ALEE: Administration to the Logo of Energy Effect (2004); Law on Energy Conservation (2007); GPN: Green Purchasing Network; METI: Ministry of Economy, Trade and Industry

#### 12.4.5 Develop Social Infrastructure: Drivers of Consumption and Sustainable Lifestyles

Based on the assessment framework of ESC mechanisms devised from the literature review in Chapter Four, there are six different social infrastructure drivers which precondition people's consumption patterns and lifestyles (see Section 4.3 for each driver's definition and details). As introduced in the following Table 12.9, all eleven cases were examined to identify what kinds of social infrastructure drivers are addressed, acted upon or missed in the case analysis data explored in the previous four sections:

The first preconditioning driver of consumption above is "economic development" which can be directed to promote improving both the production and consumption of eco, environmentally-friendly, and green products. The results therefore are expected to bring financial benefits and diverse purchasing choices to individuals through products' good quality and low cost. Seven out of the eleven examined cases (C3, C4, C5, J1, J3 and K1) indicated that efforts in this area can secure suppliers' sustainable production due to increased demand by consumers. In particular, C4 (Energy-saving Project) and J3 (Green Purchasing Network) showed this as a strong driving process led by government.

<sup>22</sup> The title "Cool China" is re-set up in 2009 based on "Temperature Setting Action" implemented across the country since 2006.

<sup>23</sup> 55 local provinces where the Green Shops are located in present year, 2009.

**TABLE 12.9 – PRIMARY DRIVERS OF CONSUMPTION**

	Chinese Case					Japanese Case			Korean Case		
	C1	C2	C3	C4	C5	J1	J2	J3	K1	K2	K3
Economic development	-	-	+	++	+	+	-	++	+	-	+
Technological progress	NA	-	+	++	NA	+	NA	+	+	NA	-
Political settings and policy actions	NA	++	-	+	-	+	NA	++	++	++	-
Cultural and historical contexts	+	-	+	-	++	-	-	-	+	-	++
Social factors and conditioning	+	+	++	+	+	++	+	NC	++	+	+
Psychological motives	-	-	++	++	+	+	++	NA	+	++	++

N.B.: ++ = Strongly positive; + = positive; - = Unidentified; NC: Not Clear; NA: Not Applicable; +\*: Planned action for coming fiscal year in 2010

The second driver entitled “*technological progress*” is about whether the social infrastructure can facilitate more efficient product supplies, especially linked with energy saving and efficiency. Potentiality of “*technological progress*” was identified in five out of eleven cases, but only one case (C4: Energy-saving Project) clearly stated this benefit in a report. Nevertheless, the Japanese and Korean cases on increased consumers’ interests in energy-saving and efficiency led by national projects reported in Section II of this report strongly indicated a cohesive correlation between consumers’ interests in energy saving/efficiency and technological advances.

The third driver of consumption is “*political settings and policy actions*”. As introduced in Table 12.8, nine out of eleven cases are clearly supported by national policies, acts, or laws. However, actual policy actions were identified in only five cases (C2, C4, J3, K1 and K2) as counted in Table 12.9 above. As with the same limitation with all other social infrastructure criterion, details of policy actions in each case was not clear because of the limited data resources, although there are indications that there might be missing information on the other six cases in this regards.

The fourth driver of consumption is “*cultural and historical contexts*” in consideration of the significance of indigenous culture in applying education for sustainable consumption projects and initiatives. Five out of eleven cases indicate:

- A strong Asian context which is community-centred in China (C1 and C2) and in Republic of Korea (K1 and K3) – Asian country context are more community-centered from its agricultural roots, in comparison with the western homogenous society. All four cases attempted to educate community members and people through the promotion of community-memberships as both a responsibility and a union sensibility.
- A unique national culture in China (C5) – Chinese has a cultural tradition has a long history of treating family or business guests with excessive foods in a restaurant to express their hospitality. Because of people’s increased incomes along with the recent national economic growth, excessive food waste has become a serious problem across the country. Within this economic and cultural context, C5 entitled “Reduction from Beginning” led by Shanghai City Council has tackled this food culture by encouraging people to order unfinished food package with 15% of a total of food costs. Utilising financial incentives to counter this cultural food habit, this campaign has achieved a high-level of success over a short period (*see Section 12.4.1 for the case details*).

The fifth consumption driver is “*social factors and conditioning*” is whether cases were trying to address the social meaning and symbolic value of material possession which is linked with peoples’ interests in financial benefits brought from their cooperation with social common interests. Within this understanding, all cases besides J3 applied measure to affect “social factors and conditioning” as shown in Table 12.9 above. In particular, three cases (C3, J1 and K1) utilised strong subsidy programmes to provide people with direct financial benefits when they cooperate to use less plastic bags, reducing household greenhouse gas emissions and reducing wastes respectively.

The final preconditioning driver of consumption is “*psychological motives*” which takes advantage of individual desires/interests to tackle environmental issues, especially consumption within this study context. Eight cases (C3, C4, C5, J1, J2, K1, K2 and K3) were identified as addressing this criterion in Table 12.9 above based on the diverse data resources as follows.

C3: “People want to get more when they do not need to pay for plastic bags, but it is a different story when they have to pay it although it is very a small penny” (From an interview extract, Ms. Han who is a resident in Shanghai - 15 September 2009).

K3: “Green Shop is a space for community practice which can address environmental issues in our community. You would be one of the key members of Green Shop who can solve those problems and do practice with future vision” (From an official home-page of Green Shop Movement, accessed 21 November 2009).

In fact, this final driver “*psychological motives*” *should* be considered in conjunction with the previous fourth and fifth drivers i.e. “cultural and historical contexts” and “social factors and conditioning” because individual desires/interests cannot be separated from the wider society that people belong to and learn many of their own personal values from.

## **12.5 Summary of Main Findings**

The issue of sustainable consumption has become increasingly important in the Northeast Asia (NEA) which is one of the regions world-wide experiencing rapid economic growth. Because of the rapid economic growth and the advanced economic status of countries in this region, China, Japan and Republic of Korea (ROK) are leading energy consumers and greenhouse gas emitters. Consequentially, development of efficient strategic policies at a national level is critical to educate people to encourage their practice of sustainable consumption. Nevertheless, studies which have explored the national mechanisms to influence individuals’ consumption behaviours and their decision-making, especially within these three countries’ contexts, have been almost absent in research fields. The followings begin with a summary of the main findings from the analysis of the eleven ESC practice cases. Key conclusions are then presented based on the main findings.

Within the background above, “the primary mechanisms to promote sustainable consumption” and the aggregate criteria in the “assessment framework of ESC mechanisms” were developed based on a literature review explored in Chapter Four. The primary mechanisms then were applied in this chapter to conduct assessment and analysis of the selected Education for Sustainable Consumption (ESC) practice cases collected from China, Japan and ROK.

### 12.5.1 The Assessment Criteria of the Primary ESC Mechanisms

A total of eleven cases (five, three and three collected from China, Japan and Korea respectively) were collected and analysed based on the assessment framework of the primary ESC mechanisms in the practice cases. From the analysis of the ESC practice cases, it was possible to identify the following five structural components of the primary ESC mechanisms in the eleven practice cases in spite of a range of applications across the three countries (see Table 12.10 below for details):

- *Catalyzing Practice of Sustainable Consumption* – which is the five procedural steps for systematic development towards sustainable consumption. The first four steps entitled “enable”, “encourage”, “engage and “exemplify” were commonly identified across all eleven analysed cases although there are some difference in positive levels found. Whilst, the final step entitled “catalyse” which is aiming at shifting social and cultural habits for sustainable consumption was identified in only one Chinese case (explored in Section 12.4.1).
- *Promote Responsible Behaviour* – which are the five stages of change in a decision-maker’s consumption practices. At the lowest platform, the first stage is “precontemplation” which indicates a decision-maker’s unawareness of subject and information. The second developing stage is “contemplation” showing a decision-maker’s consideration of the subject, i.e. some matters regarding sustainable consumption, however without action yet. The third stage is about a decision-maker’s “decision/determination” based on his/her choice. The fourth stage is “action” showing a decision-makers’ practical behaviour based on new beliefs. The highest and last stage is “maintenance” which is about a decision-maker’s sustainable support and action for a long term. The first three stages were identified in all eleven cases across the three countries. However, regarding the last two stages it was not clear to identify or could not be found in some cases (three and six out of eleven cases respectively) (explored in Section 12.4.2).
- *Develop Environmental Citizenship* – which are effective values to encourage people’s understanding of sustainable consumption and ultimately influence their patterns of purchasing. Five key values for facilitating consumers’ actual practice for sustainable consumption were examined. The first two values referred to as “pro-environmental values” linked with a personal belief in importance of environment and “individual empowerment” which is one of powerful drivers in people’s action were identified in all eleven ESC practice cases. Whilst, there are wide-range of case evidences regarding the later three values entitled “responsibility”, “simple action”, and “future vision”. For instance, all ESC cases indicated “simple action” with strong proven achievements except for one Korean case. The last value is “future vision” which needs to be reflected in the ESC practice cases to provide a clear direction for people to contribute to achieving a sustainable society as a long term impact of their good consumption practices (explored in Section 12.4.3).
- *Influence Patterns of Consumption* – which are the five types of governmental instruments that can be applied in promotion of ESC practice cases such as “regulatory instruments” using policy, act and law; “economic instrument” adopting taxing and subsidy; “educational instrument” regarding research, training, public education; “cooperative instrument” facilitating voluntary agreements from individuals/organisation; and “informal instruments”

using eco-labelling to provide a better/diverse consumers' choice. The analysis shows a wide-range of instrument applications across the three countries. For an example, four out of eleven cases were identified with a strong application of "regulatory instrument". Notably, "informational instruments" were applied in all ESC practice cases except for one Chinese case thus indicating the significance of its usage (explored in Section 12.4.4).

- *Develop Supportive Infrastructure for SCP* – which are six preconditioning drivers of sustainable consumption and lifestyles that underpin the social infrastructure and catalyse other structural components of ESC mechanisms. As with the fourth structural component "influence patterns of consumption", a wide range of applications were found across the six aggregate criterion entitled "economic development", "technological progress", "political settings and policy actions", "cultural and historical contexts", "social factors and conditioning", and "psychological motives" (explored in Section 12.4.5).

**TABLE 12.10 – ASSESSMENT OF THE PRIMARY ESC MECHANISMS IN PRACTICE CASES**

Mechanism Component	States/Elements	Chinese Cases					Japanese Cases			Korean Cases		
		C1	C2	C3	C4	C5	J1	J2	J3	K1	K2	K3
① Catalyze Practice of Sustainable Consumption	Enable	+	+	++	+	+	++	+	+	+	+	+
	Encourage	-	++	++	++	+	+	+	+	+	+	+
	Engage	-	+	++	++	+	+	+	+	+	+	++
	Exemplify	+	+	++	+	+	+	+	+	++	+	++
	Catalyse	-	NC	-	-	++	NC	NC	NC	-	-	-
② Promote Responsible Behaviour	Precontemplation	+	+	+	+	+	+	+	+	+	+	+
	Contemplation	+	+	+	+	+	+	+	+	+	+	+
	Decision/Determination	+	+	+	+	+	+	+	+	+	+	+
	Action	NC	+	+	+	+	+	+	+	NC	NC	++
	Maintenance	-	-	-	NC	NC	++	+	+	+	NC	++
③ Develop Environmental Citizenship	Pro-environmental values	+	+	+	+	+	+	+	+	+	+	+
	Individual Empowerment	+	+	+	+	+	+	+	+	+	+	+
	Responsibility	-	+	-	-	-	+	+	+	-	-	++
	Simple actions	-	++	++	-	++	NC	NC	NC	++	NC	+
	Future Vision	NC	-	-	-	-	+	+	+	NC	NC	+
④ Influence Patterns of Consumption	Regulatory instruments	-	++	++	-	-	-	NA	++	++	-	-
	Economic instruments	-	-	+	+	++	-	NA	++	+	-	+
	Educational instruments	+	+	-	-	-	+	++	-	+	+	++
	Cooperative instruments	+	+	+	-	++	-	+	+	-	+	+
	Informational instruments	-	++	++	+	+	+	++	+	++	++	+
⑤ Develop Infrastructure for SCP	Economic development	-	-	+	++	+	+	-	++	+	-	+
	Technological progress	NA	-	+	++	NA	+	NA	+	+	NA	-
	Political Settings	NA	++	-	+	-	+	NA	++	++	++	-
	Cultural Contexts	+	-	+	-	++	-	-	-	+	-	++
	Social Factors	+	+	++	+	+	++	+	NC	++	+	+
	Psychological motives	-	-	++	++	+	+	++	NA	+	++	++

N.B.: ++ = Identified with proven achievements; + = Identified with a descriptive report only; - = Unidentified; NA = Not Applicable; NC = Not Clear; +\*: Planned action for coming fiscal year in 2010; Based on the four tables in Section 12. 4(i.e. Table 12.4, Table 12.5, Table 12.6, Table 12.8 and Table 12.10)

### 12.5.2 Diversity Across the Aggregate Assessment Criteria

As shown in Table 12.10 above (which emerged from Tables 12.4, 12.5, 12.6, 12.7 and 12.9), the results of analysis indicate a wide-range of applications regarding the aggregate assessment criteria of the five primary ESC mechanisms of in the eleven cases across from China, Japan and ROK.

In regards to country diversities as shown in Table 12.10 above, there are three noticeable results from the analysis:

- None of Korean cases indicated the last criterion of *“catalyzing practice”* entitled *“catalyse”* which is an indication of major shifts in social and cultural habits to engender a cultural paradigm grounded in sustainable practice. It was also not possible to identify *“catalyse”* in all three Chinese;
- *“Maintenance”* which is the last development stage of the mechanism *“promote responsible behaviour”* was not indentified or not clear in all five Chinese cases, whilst all Japanese cases and two out of three Korean cases showed positive achievements, and;
- None of Japanese cases indicated *“simple action”* which is the third criterion of the structural component *“develop environmental citizenship”*. However, these three cases provide positive *“future vision”* which is a critical factor in promoting people’s participation for a long term period, whilst none of the Chinese cases and only one Korean case indicated this criterion.

## 12. 6 Conclusions

From the analysis of the eleven ESC practice cases collected from China, Japan and Korea, the following three key conclusions were expounded. First, it is critical to consider the *primary mechanisms of Education for Sustainable Consumption (ESC)* when we consider an efficient way to change people’s consumption patterns for a sustainable society. From the assessment framework of ESC mechanisms developed from the literature review in Chapter Four, it was possible to indentify the significance of the *primary ESC mechanisms* in promotion of sustainable consumption: *“catalyzing practice of sustainable consumption”*, *“promote responsible behaviour”*, *“develop environmental citizenship”*, *“influence patterns of consumption”*, and *“develop supportive infrastructure for SCP”*. The majority of analysed cases, especially those identified with proven achievements, showed applications of the primary ESC mechanisms facilitated by the investigation of the aggregate criteria of these mechanisms.

Second, it is also critical to develop a *balanced ESC strategy* which is approached by not only individual motivational and developmental considerations but also by consideration of social and political systems. In this regards, *assessment criteria of the ESC mechanisms* provide significant indication of what kinds of individual developmental processes for sustainable consumption within wider social and cultural contexts should be considered in a government’s policy implementation at a national level. For instance, the second and third mechanisms, *“promote responsible behaviour”* strengthening a decision-makers’ sustainable consumption choices and *“develop environmental citizenship”* inspiring proactive participation in sustainable consumption are critical to promote individual sustainable consumption practice in their daily lives. At the same time, the fourth and the

fifth ESC mechanisms referred to “influence patterns of consumption” and “develop supportive infrastructure” support the advancement of a social/political system that facilitates sustainable consumption practice. While, the first mechanism “catalyzing practice of sustainable consumption” makes these two individual targeted and two social targeted mechanisms work cohesively together as a catalyst for major socio-cultural shifts towards a culture grounded in sustainable practice. Therefore, the balance of the five primary ESC mechanisms is critical to achieve significant and lasting success over a long period.

Finally, diverse national contexts regarding the aggregate criteria of the primary ESC Mechanisms seems to be one of the critical factors in actual sustainable consumption practices when we consider diverse social, cultural and political contexts which influence individuals’ values across the three countries, i.e. China, Japan and Republic of Korea. Despite a range of applications in the eleven analysed cases, the results of analysis show a diversity of applications in certain mechanism’s aggregate criteria depending upon different country context, especially in relation to targeting social and political systems for facilitating sustainable consumption as shown in the analysis evidences on “influence patterns of consumption” and “develop supportive infrastructure”.

Meanwhile, it is necessary to bear in mind that the analysis of the ESC practice cases in this chapter sought to identify what kinds of the primary mechanisms were applied or missed in these ESC practice cases to identify efficient strategies for its future development. In other words, the analysis of this chapter was not attempting to identify which case is the best or the worst in ESC practice amongst the selected cases. Rather the analysis of this study explored what kinds of existing ESC mechanisms are applied in the selected cases and what we can learn from those positive or negative evidences to promote sustainable consumption in the three countries. Furthermore, it is still not clear what kinds of social and cultural contexts yielded from the diversity of applications in regards to the ESC mechanisms and would require a much longer study of socio-cultural value changes. There are still many questions to be examined further due to the limited data resources that were available for this analysis. Therefore, the case analysis in this chapter is a small step to understanding the primary mechanisms of ESC and therefore developing an efficient strategy for promoting the proactive participation of individuals in sustainable consumption.



**CHAPTER THIRTEEN**  
**POLICY IMPLICATIONS FOR NORTHEAST ASIA:**  
**DEVELOPING A STRATEGY FOR ESC IMPLEMENTATION**

This Chapter consists of three sections. First, it begins with overall summaries of comparative status of policy in relation to Education for Sustainable Consumption (ESC) implementation in the three countries *i.e.* China, Japan and Republic of Korea (ROK) based on reports in the previous six chapters (Chapter 6 – Chapter 11). Second, a review is made of the critical policy implications of Education for Sustainable Consumption (ESC) primary mechanisms at a national level across these three countries based on the analysis explored in Chapter 12. Third, the final section of this chapter concludes with some recommendations for policy decision-makers.

**13.1 Education for Sustainable Consumption Policy Contexts in China, Japan and Republic of Korea**

China

In comparison with Japan and ROK, the environmental policy in China, especially linked with ESC has a short history starting in the 1990s. Nevertheless, China has shown strong promotions of ESC in spite of its short history led by the central government in relation to a series of sustainable consumption-related laws and policies. In addition, all promoted regulations have been restrictedly applied across the country targeting all private, social and governmental sectors (*see Chapter Six*).

ESC has been implemented as part of Environmental Education (EE) supported by “The National Action Guideline of Environmental Communication and Education” established in 1996. However, ESC is still a very new EE theme in China and has been led mainly by the central government. Within formal education, ESC covers all existing environmental issues linked with resource management including energy saving, reducing wastes, solar energy, etc. (*see Chapter Nine for green school projects*). Regarding informal education, the government’s strong promotion of the Green Public Procurement has influenced all social sectors including public and industry sectors.

The rationale behind the government’s efforts to promote and increase government procurement of eco-labelled products is to provide diverse choices to consumers by encouraging companies to produce more high-quality, environmentally-friendly items. Despite its short history, Green Product Procurement in China has achieved distinguishable achievements as shown by the rapid increase in companies producing eco-products (e.g. 81 companies in 2007 and 444 companies in 2008; *see also Section 6.2.2 for details*). However, Green Public Procurement in China is still in the beginning era and seems to be more focused on product standards than consumers’ needs. It is therefore necessary to develop sustainable consumption policy which better reflects individual factors and contexts when we consider the long term impact of ESC, along with those national regulatory frameworks. Furthermore, a clear vision of ESC for practical implementation through national policy is still absent in spite of many numbers of regulations promoting public education projects for sustainable consumption as introduced and analysed in Chapter Twelve.

## Japan

Japan has the longest Environmental Education (EE) history amongst the three countries since the 1960s. For instance, Consumer Affairs Divisions were set up both in the Ministry of International Trade & Industry and the Ministry of Agriculture, Forestry & Fisheries in 1964. One year later, the Quality-Of-Life Bureau was established within the Economic Planning Agency. Regarding a national framework, the Consumer Protection Fundamental Act was established in 1968.

Despite these early preparations, ESC actually did not receive major attention from the central government until the 1990s. For instance, the concept of ESC was introduced into school curriculum within the formal education sector for the first time in 1992. The Ministry of Education, Culture, Sports and Technology (MEXT) then published a consumer education textbook for high school level for the first time and also started a “Teacher Training Course of Environmental Consumer Education” in 2006.

Regarding political support settings, sustainable consumption has been promoted since the late 1990s as shown in Green Purchasing Law in 2000 and Consumer Basic Act in 2004. Although it was not an exact ESC project, it was significant that The Ministry of Economy, Trade and Industry (METI) started a “sustainable consumption” project in 2003 for a two-year implementation. METI also started the Ecological Footprint Project. Recently, the Cabinet Office of Japan launched the Consumer Affairs Agency to raise consumers’ awareness towards sustainable lifestyles and transition to a low-carbon society.

It is noticeable that actual ESC mandates for specific practice seem to be weak when we consider the series of national laws, polices and acts in relation to sustainable consumption and consumer issues. In fact, in comparison with ESC in China and ROK which has been led by the central government with strong regulated promotion, ESC projects in Japan have been mainly led by NGOs and local communities/agencies. As introduced in Chapter Twelve about two ESC practices entitled “Eco-Action Points” and “Team Minus 6%” (*see Section 12.4.2 and Section 12.4.3 respectively for practice details*), even the Japanese central government-led projects are based on voluntary memberships with industries and individual households to encourage diverse actors’ participation rather than forcing them to follow strict regulations.

Meanwhile, Japan has recently been leading Education for Sustainable Development (ESD) not only in Northeast Asia but also world-wide as shown its contribution to “Decade of Education for Sustainable Development (DESD)” which is the ten year ESD plan (2005-2014) in cooperation with UNESCO and many other international organisations. From the Inter-Ministerial Meeting on DESD joined by the Cabinet Office, MOE, MEXT, the action plan was drafted in 2006 to implement a diverse ESD agenda to encourage participation by all social sectors to build a sustainable society together such as “Diverse Places of Education and Implementing Actors”, “Learning from Participation and Experience”, and “Nurturing Abilities for Social Participation”. Despite these positive efforts on ESD, it is significant that ESC has not been given direct attention in the action plan especially when we consider that ESC has been broadly acknowledged as an important topic of EE not only in Japan but also world-wide and one of the specific themes of ESD by UNESCO which is a leading UN agency for DESD.

## Republic of Korea

EE in ROK has a school-based history since the 1980s. For instance, the concept of EE was reflected in the Fourth National Curriculum for the first time in 1985. Then the concept of EE was reinforced in the Fifth, Six and Seventh National Curriculums in 1985, 1992 and 1997 respectively. In particular, the independent subject of Environmental Science education was also adopted since Sixth National Curriculum which is a situation that is unique world-wide. Despite this distinguishable EE development in comparison with China and Japan, ESC which is acknowledged as a part of EE in ROK still remains in a background era as the majority of ESC practices are simply considered as education for “domestic waste separation” or “recycling” within the school curriculum. There are few ESC practices which are linked to efficient resource management or reflection on the recent global issue of reducing CO<sub>2</sub> emission. With this background, the Korean ESC cases introduced in Chapter Twelve are significant in being a preliminary attempt to identify good practice mechanisms in the country.

Regarding the ESC history in ROK, social education led by NGOs has taken a more important role in its development and practices than formal education. Social ESC developed through campaigns for enlightenment since the 1990s owing to a rapid growth in the number of environmental NGOs (see *Figure 8.2 in Chapter Eight for details*), although some of NGOs can be traced back to the 1980s such as Consumers Korea founded in 1982 and which is now one of the biggest and most influential organisations in ROK. Nevertheless, EE programmes including ESC activities conducted by NGOs were at a standstill stage and did not fully meet citizens’ demands for quality in spite of their quantitative growth. Within this background, the Environmental Education Promotion Law was finally established in 2009 in order to improve quality of EE programmes and also promote people’s empowerment through social education.

Regarding the government’s efforts on national policy for sustainable consumption in ROK, as in China, it has mainly been centred on promoting eco-labelled products since the 1990s. For instance, the Environmental Technology Development and Support Law was established in 1994, and this was a precursory mandate for the provision of the specific law Eco-Product Purchasing Promotion Law established in 2004 and revised in 2009. By encouraging eco-product industry through incentives and education to provide diverse choices with low-prices to consumers, the Korean government has achieved to raise consumers’ awareness towards eco-products and its importance for “sustainability”. According to a report<sup>1</sup> by Korea Environmental Industry & Technology Institute (KEITI)<sup>2</sup> in 2007, 59.7% of respondents purchased or used eco-products. In addition, 68.2% of respondents expressed their willingness to buy eco-products even in a case of 10% higher price more than a standard brand-name item. The people’s interests in eco-products also were increased by 24.9% i.e. from 57.9% to 82.8%.

Meanwhile, a recent national movement on Green Growth indicates Korean government’s strong willingness to build a low-carbon society. To address climate change issues by reducing CO<sub>2</sub> emissions and achieve sustainable economic growth, the Korean government launched the Presidential Committee for Green Growth and established the National Strategy for Green Growth and the Action Plan 2009-2013 in 2009. Under this governmental mandate, Education for Green

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<sup>1</sup> [http://www.koeco.or.kr/document/document\\_list.asp?category\\_nm=total](http://www.koeco.or.kr/document/document_list.asp?category_nm=total) A survey participated by 1024 respondents who were over 20 years old across the country in 2007.

<sup>2</sup> KEITI was re-named from Korea Eco-Product Institute in 2009.

Growth<sup>3</sup> including ESC issues was set up in the same year to promote sustainable lifestyles and has conducted many local community-based projects across the country in this short time period. Nevertheless, ESC within Education for Green Growth is still at the beginning of its development in Korea when we consider the quality of projects/programmes linked with both the government's and the public's limited understandings of ESC narrowly centred on "eco-labelling", "recycling" and "domestic waste separation".

### 13.2 Implications from Case Findings on ESC Policy

It is important to recall the following key research question of this policy research introduced in Chapter Two in order to seek knowledge and information about strategic ESC mechanisms from the eleven ESC case findings: *What is the government's role in influencing consumer decision making through education for sustainable consumption?* Hence, this section explores two specific questions:

- 1) To provide an understanding of effective ESC policy: What are the contents of effective ESC policies? - discussed in Section 13.2.1, and;
- 2) To provide practical policy recommendations: Where should government target/intervene to make systematic changes in consumers' consumption pattern through education? – explored in Section 13.2.2.

#### 13.2.1 Critical Structure of Effective ESC Policy Promotions

From the analysis of eleven ESC good practice cases collected from China, Japan and ROK, both commonalities and diversities of application of the primary mechanisms across the three countries were identified as reported in Chapter Twelve. All five primary mechanisms of ESC entitled "catalyzing practice of sustainable consumption", "promote responsible behaviour", "develop environmental citizenship", "influence patterns of consumption" and "develop supportive infrastructure for sustainable consumption and production" (see Figure 4.3 in Chapter 4; see also Figure 13.1 below) were commonly identified across the three countries, although there are some different levels amongst each mechanism.

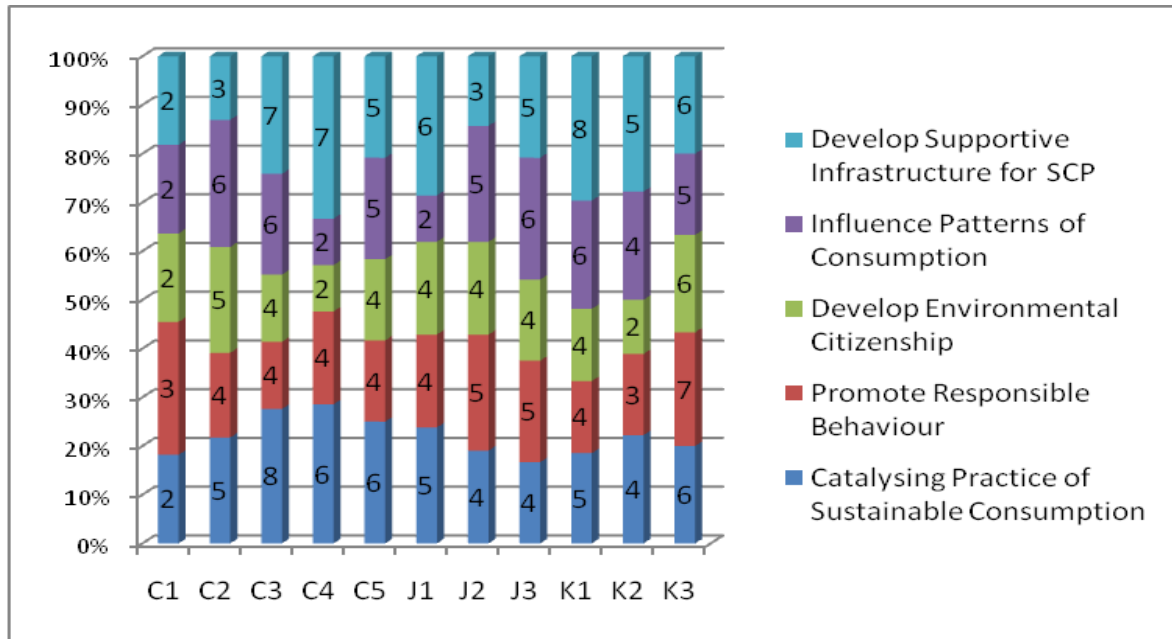
The case findings, especially from their commonalities across the five primary ESC policy mechanisms, imply the following two key features which this research refers to as "critical structure" of effective ESC policies. Developmental levels of these two critical elements seem to be vital in ESC policy implementation in success as follows:

- 1) *Motivational Factors of Personal and Individual Practice* – which easily can be failed to notice in the formulating process of a policy framework at a national level; but these factors are critical for encouraging people's voluntary participation and their empowerment; and the case findings, especially linked with the two primary ESC mechanisms "Promote Responsible Behaviour" and "Development Environmental Citizenship", indicate the significance of motivating personal and individual practices in formulating ESC policy.

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<sup>3</sup> <http://www.egg.go.kr/>: The government opened Education for Green Growth to the public from 15 August, 2009.

**Figure 13.1 – Distribution of Aggregate Criteria of the Primary ESC Mechanisms**



N.B. A total of identified positive cases per sub-mechanism components in Table 12.4, Table 12.5, Table 12.6, Table 12.8 and Table 12.10 displayed in Section 12.4 are converted into scores of each country case; +=1 (positively reported but no proven statistical achievements), +=2 (Strongly positive and proved with statistical achievements), - = 0 (Unidentified); NC=0 (Not Clear).

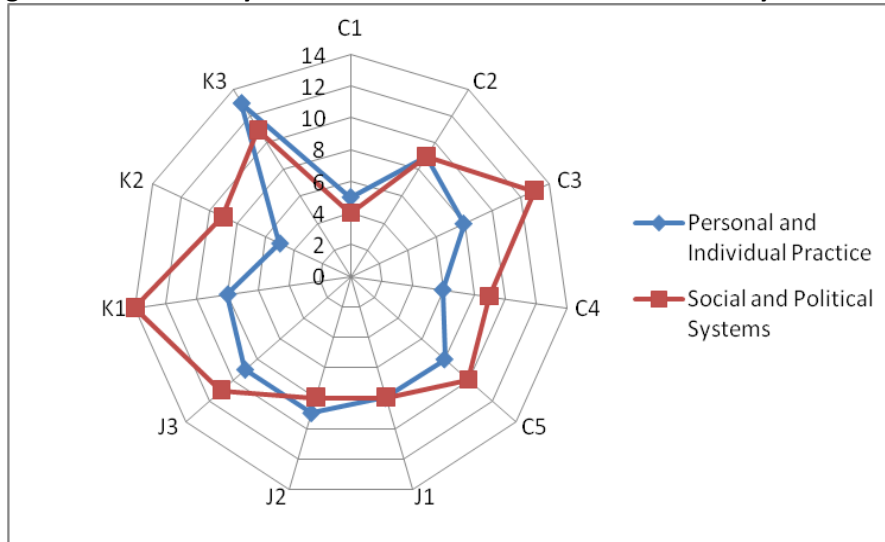
2) *Achieved Levels of Social and Political Systems* – which are preconditions of diverse national instruments and social infrastructure which practically support consumers’ practices in sustainable consumption; at the same time, the analysis on governmental tools and instruments indicates a complexity of social and political systems which this research could not fully explore due to the limited data resource and scope of study.

In addition, the case findings on policy promotions provide two noteworthy implications:

- 1) *Importance of balanced contents of ESC Policy* – between the two critical elements of “Motivation of Personal and Individual Practice” and “Achieved Levels of Social and Political Systems”, especially regarding “maintenance” of ESC practice for long-term impacts.
- 2) *Significance of social contents of ESC policy* – integrated with cultural contexts and psychological motives not only to help personal understandings of happiness and quality of life to develop a new value of material possessions but also to address social and cultural shifts to a new direction of “sustainable consumption”.

First, the case findings imply an importance to apply balanced ESC policy which considers both personal motivation factors and also social and political systems. As presented in Figure 13.2 below, the Chinese and Korean cases indicate that their social and political systems are strongly adopted more than considerations of personal and individual practice motivations. That is, diverse political instruments utilising strict regulations have been applied and led by central governments to promote sustainable consumption in China and ROK, whilst the Japanese cases give much more weight to the encouragement of voluntary individual/group memberships in practice. Noticeably, this fact seems to be related with the improved “maintenance” of ESC practice by providing future vision.

**Figure 13.2 – Diversity of Critical Structure of Effective ESC Policy Promotions**



N.B. A total of identified positive cases per sub-mechanism components in Table 12.4, Table 12.5, Table 12.6, Table 12.8 and Table 12.10 displayed in Section 12.4 are converted into total scores of each country case; +=1 (positively reported but no proven statistical achievements), ++=2 (Strongly positive and proved with statistical achievements), - = 0 (Unidentified); NC=0 (Not Clear), Nonetheless, the intervals between different numerical scale are not necessary equal as it is simply used for the sense that higher numbers represent a stronger application reported/proven in analysed cases.

Second, it is significant to integrate “Personal and Individual Practice” and “Social and Political Systems”, especially making a linkage between personal desires for material possessions and cultural contexts, social factors and psychological motives. For instance, the food waste reduction campaign (C5 entitled Reduction from Beginning) which proves great achievements by tackling individual personal needs through a reconsideration and change of traditional culture i.e. non-sustainable consumption style. The case findings also imply that this integration is still not enough and not well reflected in ESC policy across the three countries as shown in the eleven cases.

### 13.2.2 Critical Contents of Effective Policy ESC Promotions

The case study on ESC promotions provides two noticeable indications on what kinds of contents we need to consider for promoting ESC:

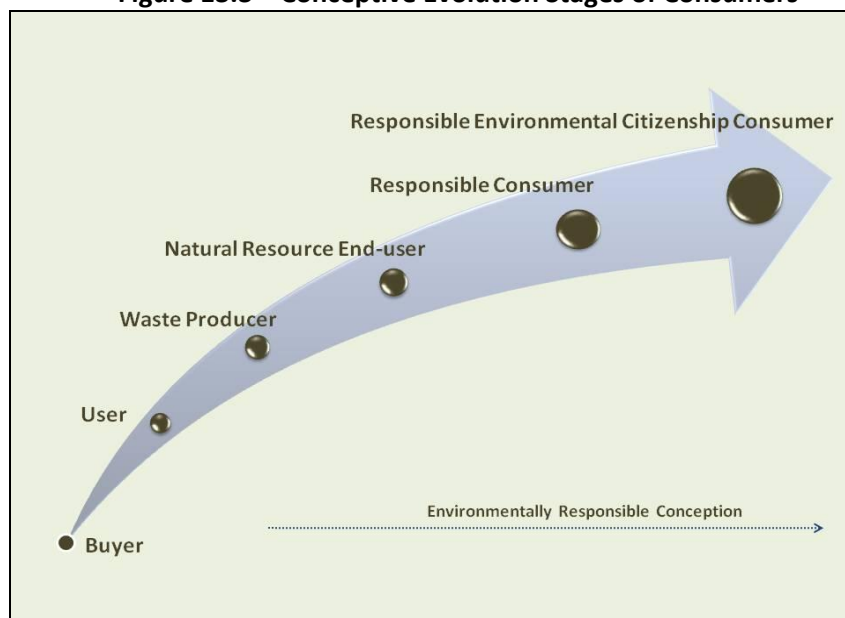
- 1) Significance of the procedural steps of ESC to help change people’s understanding of sustainable consumption which is a critical factor to let them engage in action, and;
- 2) Importance of social infrastructure which provides diverse incentives in consideration of individual and cultural perspectives to encourage people to practice sustainable consumption lifestyle shifting from traditional non-sustainable habits.

First, the case findings on “catalyzing practice of sustainable consumption” which is the procedural steps for systematic development towards sustainable consumption imply where government should target to make systematic changes in consumers’ consumption patterns through education: “enable”, “encourage”, “engage”, “exemplify” and “catalyse”. This significance of procedural steps also indicates the importance of people’s understandings towards what consumption is and where is his/her responsible position in consumption processes as a consumer. For instance, Figure 13.3 below shows the evolutionary stages of people’s conception towards their responsible positions as a

consumer based on a report on Education for Sustainable Consumption in Republic of Korea presented by Ko and Moon at the Regional Workshop on Education for Sustainable Consumption in China, Japan and ROK (see Choi and Didham, 2009):

- *Buyer* – who understands any products simply as objects linking with personal needs only;
- *User* – who understand himself/herself as a user of products and is not aware of any consumption processes;
- *Waste producer* – who starts to be aware of consumption process, but still has a limited understanding of consumption linked with only wastes;
- *Natural resource-end user* – who understands the limited natural resources, but still is not fully aware of a responsibility towards un-sustainable consumption processes or its consequences;
- *Responsible consumer* – who accepts a responsibility of consequences of consumption processes in linkage with limited natural resources and environmental issues; Nevertheless, he/she still has a gap between a sense of responsibility and actual action, and;
- *Responsible environmental citizenship consumer* – who engages in environmental action voluntarily based on full understandings of consumption processes and acceptance of its responsibilities and developed environmental empowerment.

**Figure 13.3 – Conceptive Evolution Stages of Consumers**



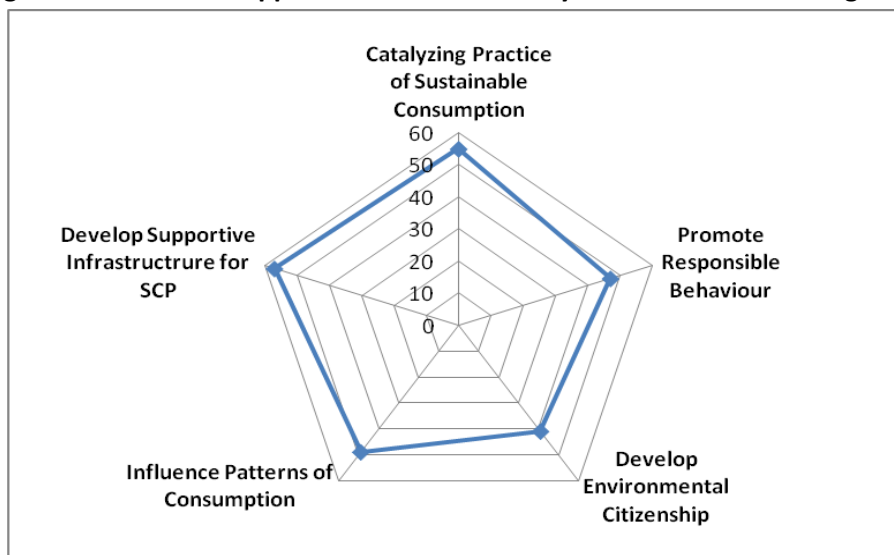
(Based on Choi, M. Y., Qing, T. and Didham J. R., 2009, p62)

Meanwhile, the procedural steps of “catalyzing practice of sustainable consumption” above are a kind of an intermediate gear between two different targeting objectives *i.e.* personal/individuals and social/political systems (see Figure 4.3 Primary Mechanisms to Influence Consumer Behaviour

through ESC). Therefore, well-developed strategic procedural steps, especially in consideration of the conceptual development of stages of consumers can bring synergy effects to both targeted objectives.

Second, the case study analysis also indicates that current ESC policies seem to depend more on strictly regulated instruments and impacts on the social infrastructure (mainly using economic development or technological progress) than they do on applications towards individual behaviour and value change across the three countries as shown in Figure 12.4 below. At the same time, regarding considerations of ESC policy applications towards individual perspectives, the majority of analysed cases report effective promotion of “simple action” which seems to correlate with a low level of “maintenance” of those ESC projects and a lack of “future vision”. Furthermore, reflection of “psychological motives” and “cultural contexts” in the development of the social infrastructure seems to be critical for actual sustainable consumption promotions in ESC policy contents (see Table 12.10 for details of assessments on each ESC policy mechanism and its aggregate criteria). Nevertheless, the study on this focus needs to be explored further because of the limited data resources and its depth.

**Figure 13.4 – Overall Applications of the Primary Mechanisms of Strategic ESC Policy**



N.B. A total of identified positive cases per sub-mechanism components in Table 12.4, Table 12.5, Table 12.6, Table 12.8 and Table 12.10 displayed in Section 12.4 are converted into total scores of each country case; +=1 (positively reported but no proven statistical achievements), ++=2 (Strongly positive and proved with statistical achievements), - = 0 (Unidentified); NC=0 (Not Clear), Nonetheless, the intervals between different numerical scale are not necessary equal as it is simply used for the sense that higher numbers represent a stronger application reported/proven in analysed cases.

### 13.3 Conclusions

Overall, there are two key features of the primary ESC mechanisms in the selected good practice cases from China, Japan and Republic of Korea: 1) As the identified *commonality* - all five primary mechanisms of ESC were commonly identified across the three countries, although 2) As the identified *diversity* - there was a range of application amongst aggregate criteria of the mechanisms introduced. These two key findings indicate the significance of not only utilising the primary ESC mechanisms but also reflecting indigenous social and cultural factors to affect consumers’ values and



motivations in implementing efficient strategies as part of a national framework for sustainable consumption as briefly summarised in the diversities across the three countries.

In particular, the case study analysis implies that ESC policies need to address two different but linked perspectives within their structure and contents *i.e.* motivations of personal/individual practices and supporting social and political systems for these practices. These critical perspectives are closely linked with the two goals raised at the beginning of this research: 1) Identify the primary means to influence consumer behaviour and encourage consumer's proactive participation in sustainable consumption; and 2) Elaborate the strategic policy steps required to implement successful ESC and consumer awareness raising campaigns.



## CHAPTER FOURTEEN

### RECOMMENDATIONS: PLANNING EDUCATION FOR SUSTAINABLE CONSUMPTION

*We stand now where two roads diverge. But unlike the roads in Robert Frost's familiar poem, they are not equally fair. The road we have long been travelling is deceptively easy, smooth superhighway on which we progress with great speed, but at its end lies disaster. The other fork of the road – the one 'less travelled by' – offers our last, our only chance to reach a destination that assures the preservation of our earth. The choice, after all, is ours to make (Carson, 1962: 240).*

#### **14.1 Policy Structure and Contents of Education for Sustainable Consumption**

##### **14.1.1 Primary Significance for General Policy Structure**

The findings with primary significance across the eleven case studies relate to the distinction of the five primary mechanisms for promoting sustainable consumption. Conclusive findings on the relevance and importance of these five mechanisms can be drawn from across the case studies which provide specific implications for the general structure of ESC policies.

- 1) *The Five Primary Mechanisms of ESC* – entitled “develop environmental citizenship”, “promote responsible behaviour”, “catalyzing practice of sustainable consumption” “influence patterns of consumption” and “develop infrastructure for SCP” are significant structural components in formulating effective ESC policy.
- 2) *Motivational Factors of Personal and Individual Practice* – are often underrepresented in the planning process of policy frameworks at the national level, but these factors are essential to encourage individuals' voluntary participation and empowerment as personal changes in consumption practices appear rooted in meaningful and practical experience.
- 3) *Supportive Social and Political Systems* – provide the practical facilitation for sustainable consumption becoming the preferable and normal option of practice. However, to develop a supportive infrastructure for SCP, it is necessary to consider directly the preconditioning factors that drive current consumption practices. The analysis of efficient governmental tools and instruments for promoting sustainable consumption indicates a complexity of social and political systems which this research could not fully explore due to its limited data and scope.
- 4) *Well-balanced Contents of ESC Policy* – across the three targets of the identified ESC mechanisms “Personal and Individual Practice”, “Social and Political Systems” and “Strategic Procedure” can result in a synergy effect for effective implementation of ESC policy. This appears especially true in developing a supportive infrastructure for sustainable consumption as a vital tool for enabling people to maintain their proactive participation in daily life.
- 5) *Social and Cultural Contents of ESC Policy* – which reflect indigenous contexts regarding consumption patterns are significant when we consider how ESC can have specific national and local applications, especially for effecting change over a short period of time. Regarding

prevalent values towards food and material possessions, traditional consumption habits appear closely linked with socio-cultural contexts and factors thus remaining very resistant to change. ESC policies linking socio-cultural and psychological motivations with traditional habits are necessary to address personal understandings of happiness and quality of life in order to develop a new value of material possessions, and this in turn provides the stimulus for socio-cultural shifts towards a normalised vision of sustainable consumption.

#### **14.1.2 Secondary Significance for Specific Policy Contents**

There are also several findings from the case studies regarding specific aggregate criteria in the assessment framework. These findings demonstrate a secondary significance because they are not represented across all cases. Thus, it is possible to highlight these as good practice areas of effective policies, however to provide conclusive evidence on the level of significance of each policy measure identified below requires further research.

- 1) *Economic Incentives* – The provision of financial savings/benefits for sustainable consumption is demonstrated as an easy way to engage consumers and promote action. It is possible to divide economic incentives into two categories based on amount of savings (small or large) and on regularity of consumption (frequent or seldom). Small savings in relation to frequent consumption actions appears to have more impact on social and cultural factors, then do large savings on irregular consumption actions.
- 2) *Regulation Coupled with Information Provision* – When regulations are put in place to stop specific negative consumption behaviours, the utilisation of informational instruments is an important part of the effectiveness of this policy measure to help people understand the purpose of the regulations and encourage the maintenance of practice. That is, people's commitment to long-term practice of sustainable consumption can be catalysed when they gain more understanding through information provision as strongly shown in several cases.
- 3) *Correlation between "Maintenance" and "Future Vision"* – Four of the five cases that achieved the "maintenance" criteria of the second mechanism also indicated "future vision". In this research, "future vision" encourages individuals that they can affect change towards an achievable positive future and sustainable society. The significance of this correlation deserves attention in future research as there may be a causal linkage between the promotion of "future vision" and consumer progress towards long-term maintenance of sustainable consumption.
- 4) *Visualising "Responsibility" Rationales for Participation in Sustainable Consumption* – To facilitate more individuals' direct engagement, providing information about the clear consequences between their consumption choices and the wider environmental and social impacts of these practices appears to be vital. In particular, integrating a sense of responsibility with a sense of community seems to strengthen ESC projects' long term success as demonstrated in the Korean case "Green Shop Movement".
- 5) *Missing Linkage between "Simple Actions" and "Future Vision"* – Though both criteria are important factors in developing environmental citizenship, there appears to be difficulty in aligning these two values. When simple actions are promoted, it appears difficult to achieve

future vision, and vice versa. Nevertheless, as shown in some Chinese cases, an ESC strategy of “simple action” seems to be very effective as the clear guidance facilitates people to practice with better understanding. Future research is therefore needed to address how best to reconcile this deficiency in current policy.

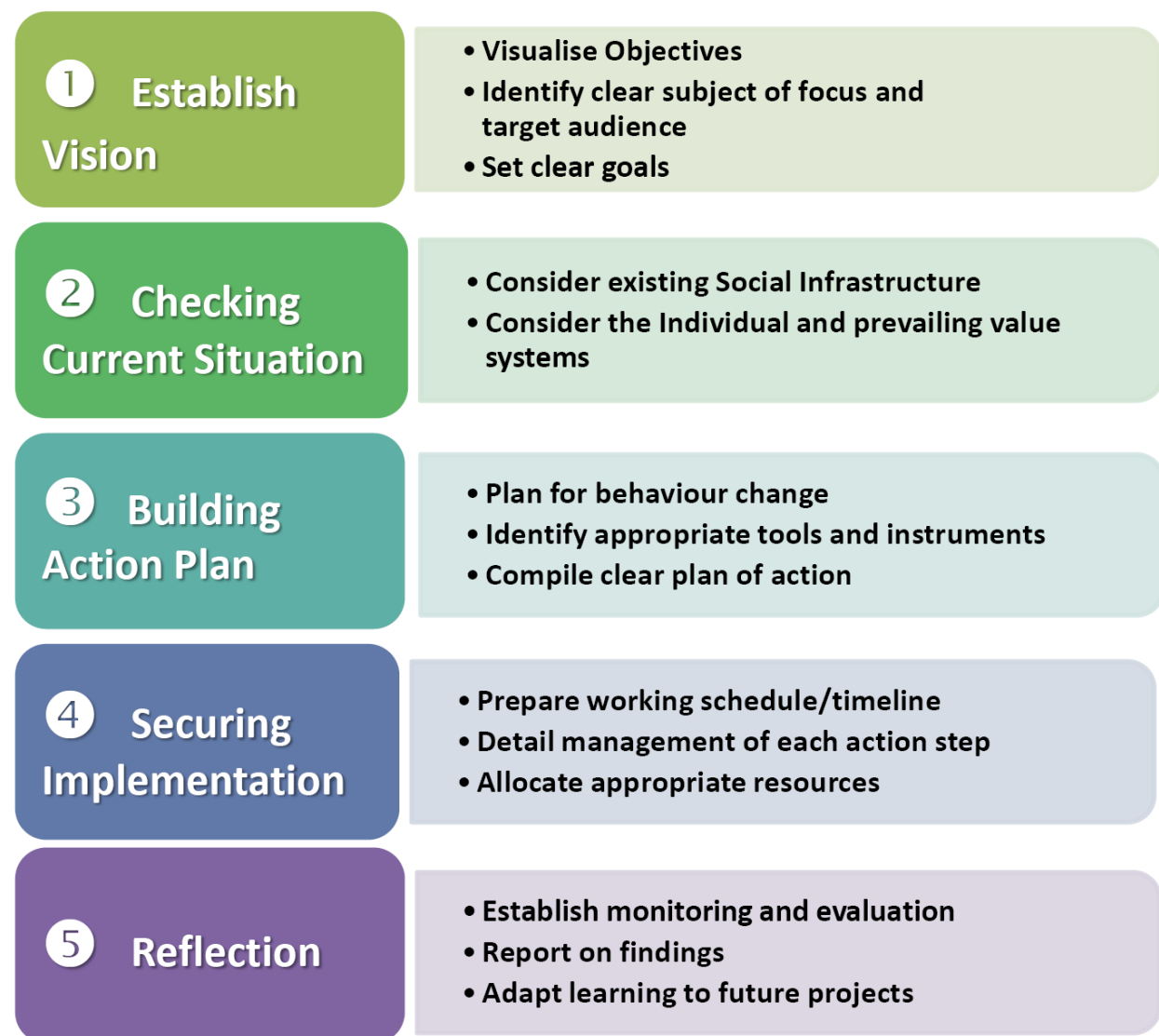
## **14.2 Five-Point Strategy for Planning Education for Sustainable Consumption**

The assessment of the selected cases provides a strong understanding of how the primary mechanisms to promote sustainable consumption apply in practice. The mechanisms themselves can be used to identify the important factors of effective ESC campaigns. It would also be possible to develop evaluation criteria of from the presented assessment framework. Moving forward with recommendations for policy makers, these mechanisms provide an outline for planning effective consumer ESC campaigns. An effective consumer education initiative should follow a more systematic process however, and it is necessary to incorporate an understanding of current contexts to pinpoint where successful interventions may occur. The following discussion provides a detailed strategy that can be utilised by government officers to prepare an effective campaign for consumer ESC.

A strong consumer education strategy for sustainable consumption will need to be holistic in nature and should utilise opportunities outside the scope of normal education activities. One of the main goals of this chapter is to develop a clear outline of the strategic actions required for preparing and implementing an effective consumer education campaign for sustainable consumption. The hope is that this strategy will provide the rigor to ensure effectiveness but also allow enough flexibility to apply in diverse circumstances. The purpose is to provide a step-by-step process for conceptualising and planning a campaign for consumer education on a chosen sustainable consumption topic, and thus to support the implementation of an effective campaign. This strategy does not detail a specific focus for a campaign, rather it is based on the assumption that consumer education campaigns will be implemented on a variety of sustainable consumption topics and attempts to support their development. Depending on the focus of topic, a given campaign may be short and concise or it may be lengthy and diverse. In regards to this strategy, the efforts and time put into each step must correlate with the overall size and scope of the campaign being planned.

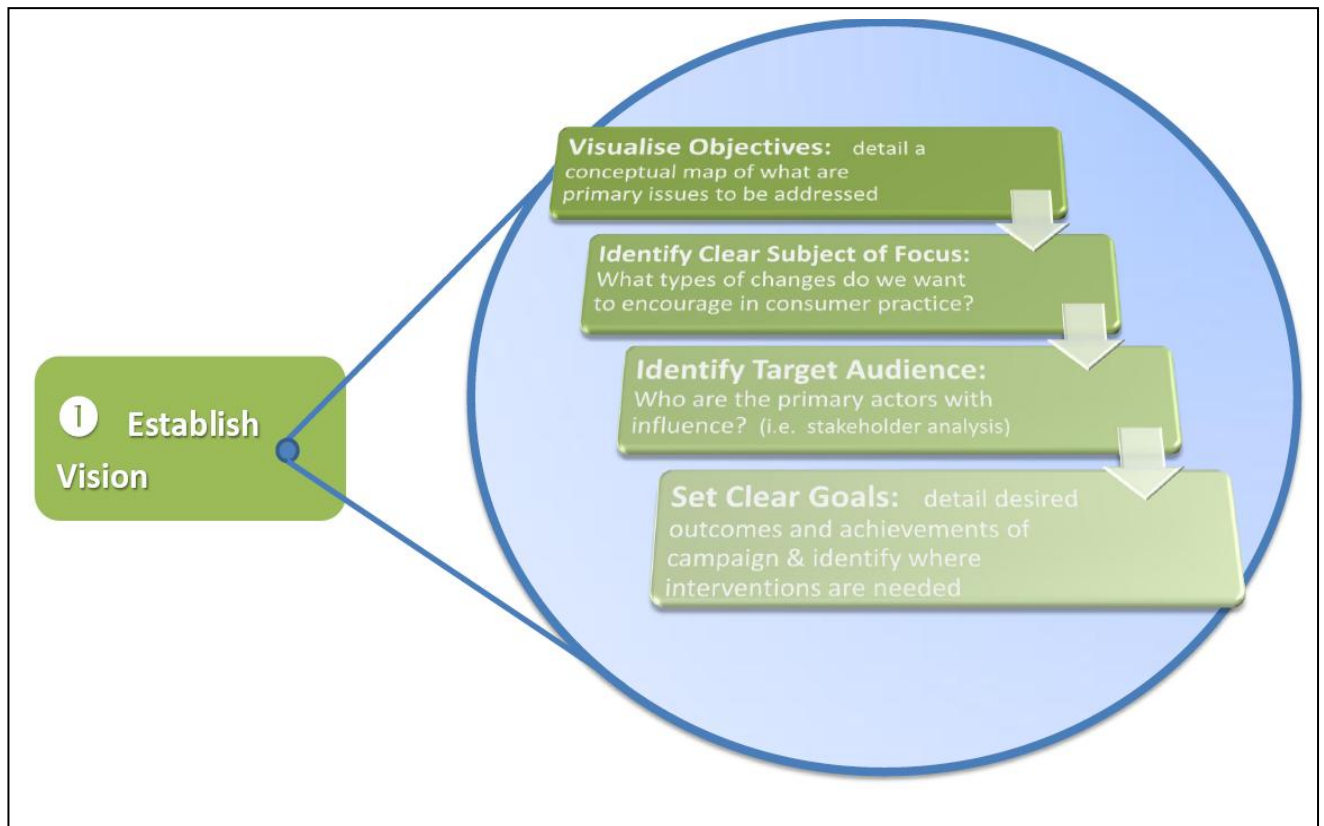
The planning process established here is based on five primary steps: 1) Establish Vision, 2) Checking Current Situation, 3) Building an Action Plan, 4) Securing Implementation, and 5) Reflection. Each step incorporates multiple components and utilises the five sets of assessment criteria presented in table 3.2 of this chapter to provide a clear process of investigation and elaboration. Though there are five steps to the overall planning process, the second and third steps are where the majority of effort and time will occur on producing an action plan. The first step serves as the initial visualisation of the project, and the fourth and fifth steps are part of the implementation.

**FIGURE 14.1 – FIVE-POINT STRATEGY TO PLAN EDUCATION FOR SUSTAINABLE CONSUMPTION**



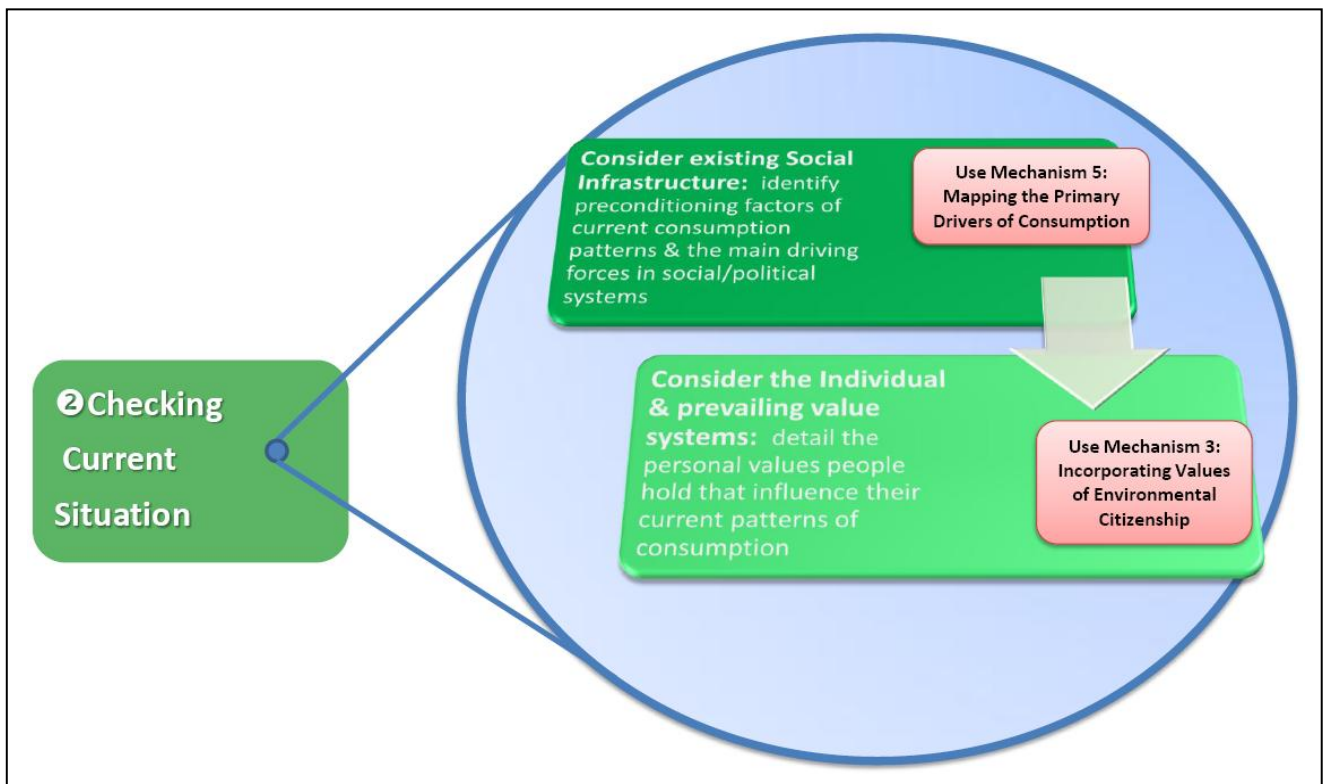
**Step One – Establish Vision** is the initialising stage of the process and provides the activities to ensure that the upcoming ESC campaign is well conceptualised. Within this step, there are four action components: i) visualise objectives, ii) identify clear subject of focus, iii) identify target audience, and iv) set clear goals for the campaign. The first action, visualise objectives, requires detailing a conceptual map of what primary issues should be addressed in this project. It may be that the given ESC campaign is a stand-alone activity, and this action is vital to establishing a clear starting point and focus. However, it may be that the planned ESC campaign will link to a larger project working across many sectors, and then the main purpose is to identify how the ESC aspect of this overall project will support consumer awareness raising and behaviour change. The second action, identify clear subject of focus, follows on from identifying a general topic, and must detail clear areas where change is desired. In this step, it is important to consider “what types of changes do we want to encourage in consumer practice”? The third action, identify target audience, is aimed at gaining an understanding of who are the primary actors with influence in regards to the chosen subject. Traditional methods of stakeholder analysis will support this action. The fourth action, set clear goals, is the final part of establishing vision by detailing the outcomes and achievements the campaign should result in. In consideration of this action, it is important to consolidate the information produced in previous three actions into a consideration of where interventions and improvements are needed.

**FIGURE 14.2 – STEP ONE: ESTABLISH VISION**



**Step Two – Checking Current Situation** is the stage of the process to investigate and assess the existing contexts and factors the campaign will have to account for. There are two action components within this step: i) consider existing social infrastructure, and ii) consider the individual and prevailing value systems. The first action, consider existing social infrastructure, aims at identifying the preconditioning factors of current consumption patterns and the main driving forces in social/political systems. The analysis of social infrastructure in this system can be supported by mapping the primary drivers of consumption as outlined in mechanism 5 of table 3.2. The second action, considering the individual and prevailing value systems, aims at directly understanding the personal values people hold that influence their current patterns of consumption. This can be supported by investigating how close or far away the general population is to incorporating the values of environmental citizenship highlighted in mechanism 3 of table 3.2. The two actions of this step should provide a clear understanding of what the current situation is and where there are opportunities to influence change. However, this step can be part of a lengthy or brief process, and it is important to correlate the time input at this step to the overall scope and efforts being put into the entire process. In comparison of the overall project cycle, this step should likely account for between 10-20% of the entire length of time. There are several potential methods that can be utilised during this stage that will correlate with time allocation (from shortest to longest) including expert group/consultation, public roundtable, consumer questionnaire or survey of consumption patterns.

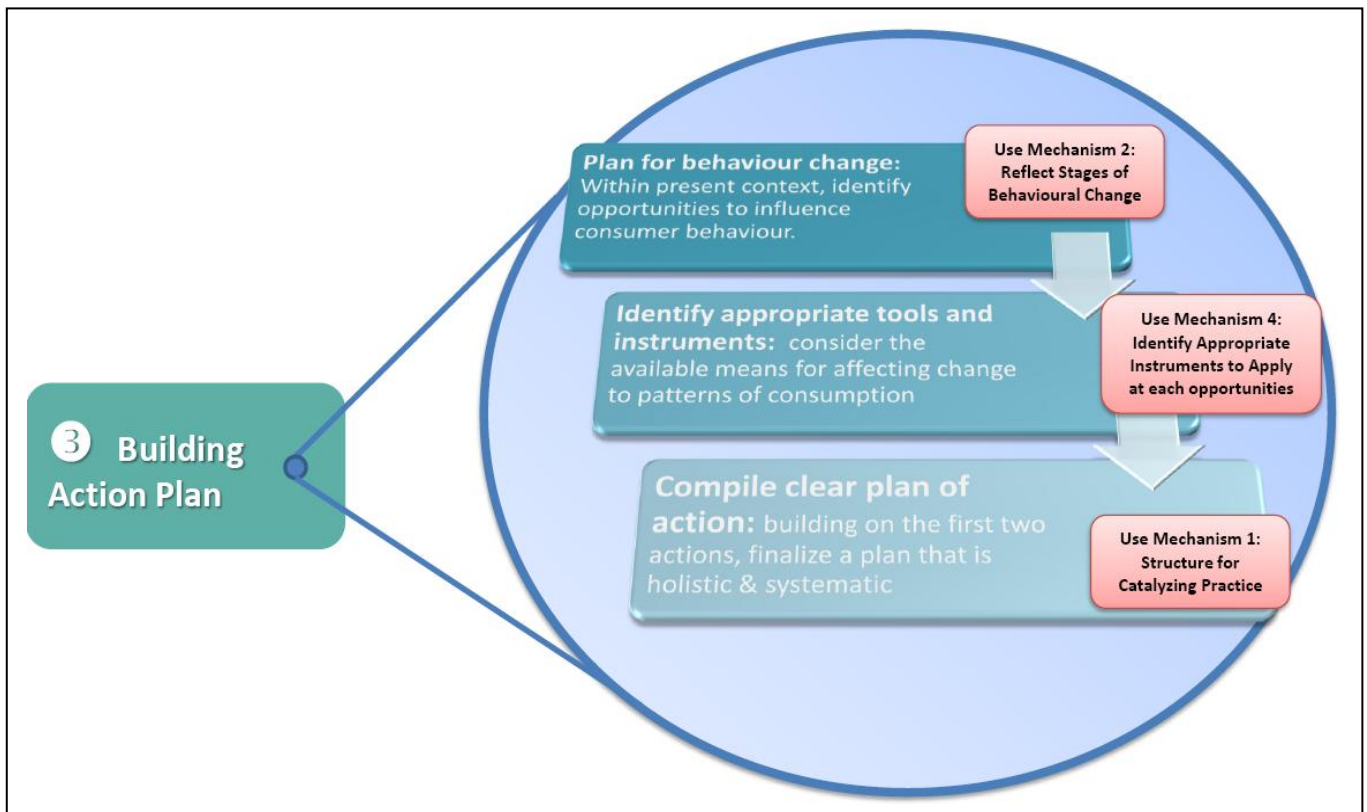
**FIGURE 14.3 – STEP TWO: CHECKING CURRENT SITUATION**





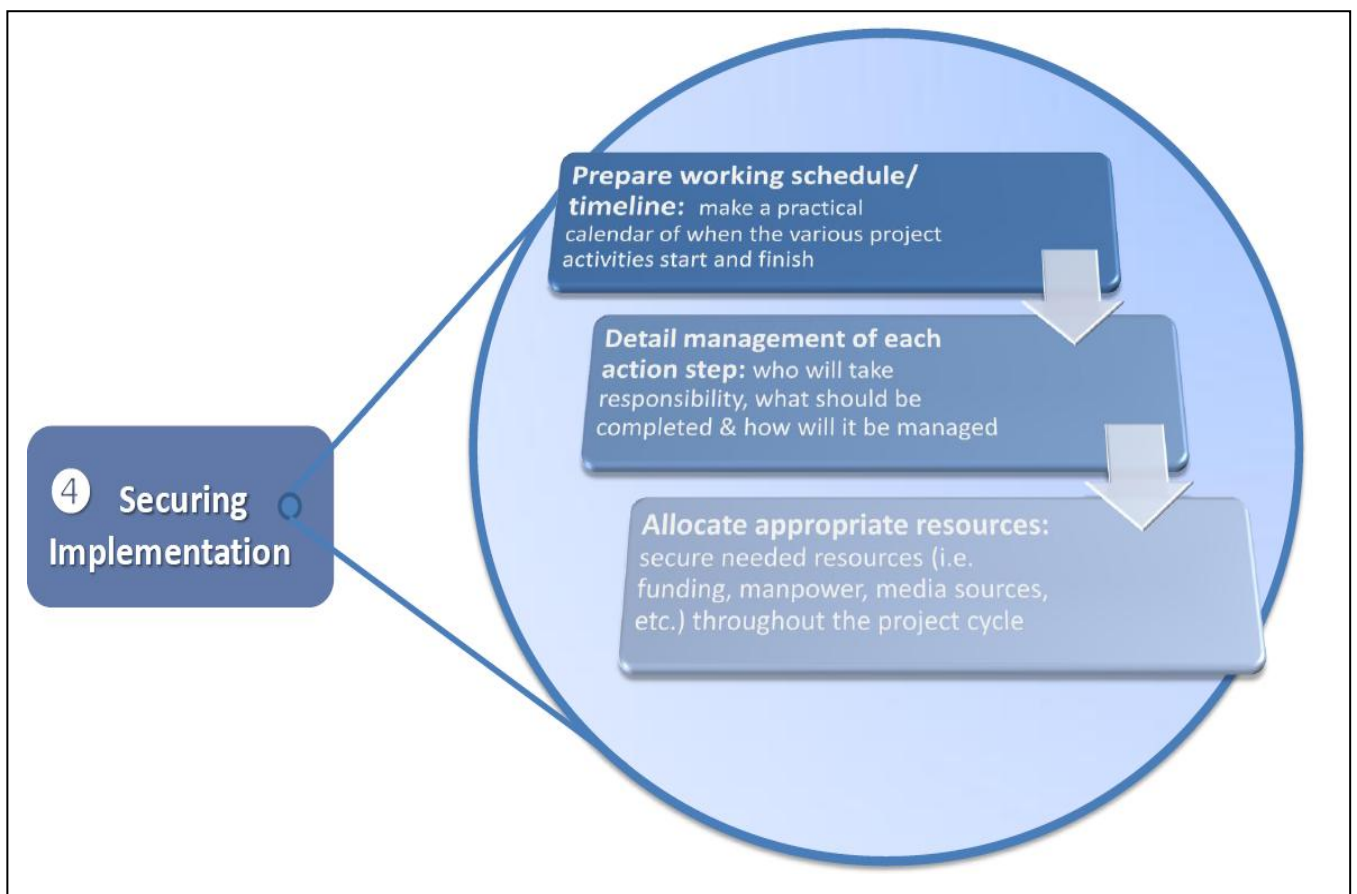
**Step Three – Building Action Plan** is the main stage of detailing the actions that will be incorporated in the consumer education campaign. Based on the review conducted in step two, it is possible to recognise what are the factors currently influencing consumption patterns. The initial efforts in this stage are to identify areas to influence the existing systems towards change. There are three action components within this step: i) plan for behaviour change, ii) identify appropriate tools and instruments, and iii) compile a clear plan of action. The first action, plan for behaviour change, incorporates the stages of change in a decision-maker from mechanism 2 in table 3.2 as a tool of investigation. It is important to reflect on the current situation elaborated in step 2 and consider where in this situation are there opportunities to influence consumer behaviour. Furthermore, it is also important to consider how the overall timeline of action relates to the stages of behavioural change to ensure a systematic movement through them. The second action, identify appropriate tools and instruments, can utilise the efficient tools and instruments outlined in mechanism 4 of table 3.2 as a form of review. The goal of this action is to consider the available opportunities for affecting change and to identify the appropriate instruments to apply at each of these opportunities. The third action, compile clear plan of action, builds on the points highlighted in the first two actions and tries to finalize a plan that is holistic and systematic. To support this action, the procedural steps outlined in mechanism 1 of table 3.2 should be considered, and the plan should be structured around accounting for each of these procedures.

**FIGURE 14.4 – STEP THREE: BUILDING AN ACTION PLAN**



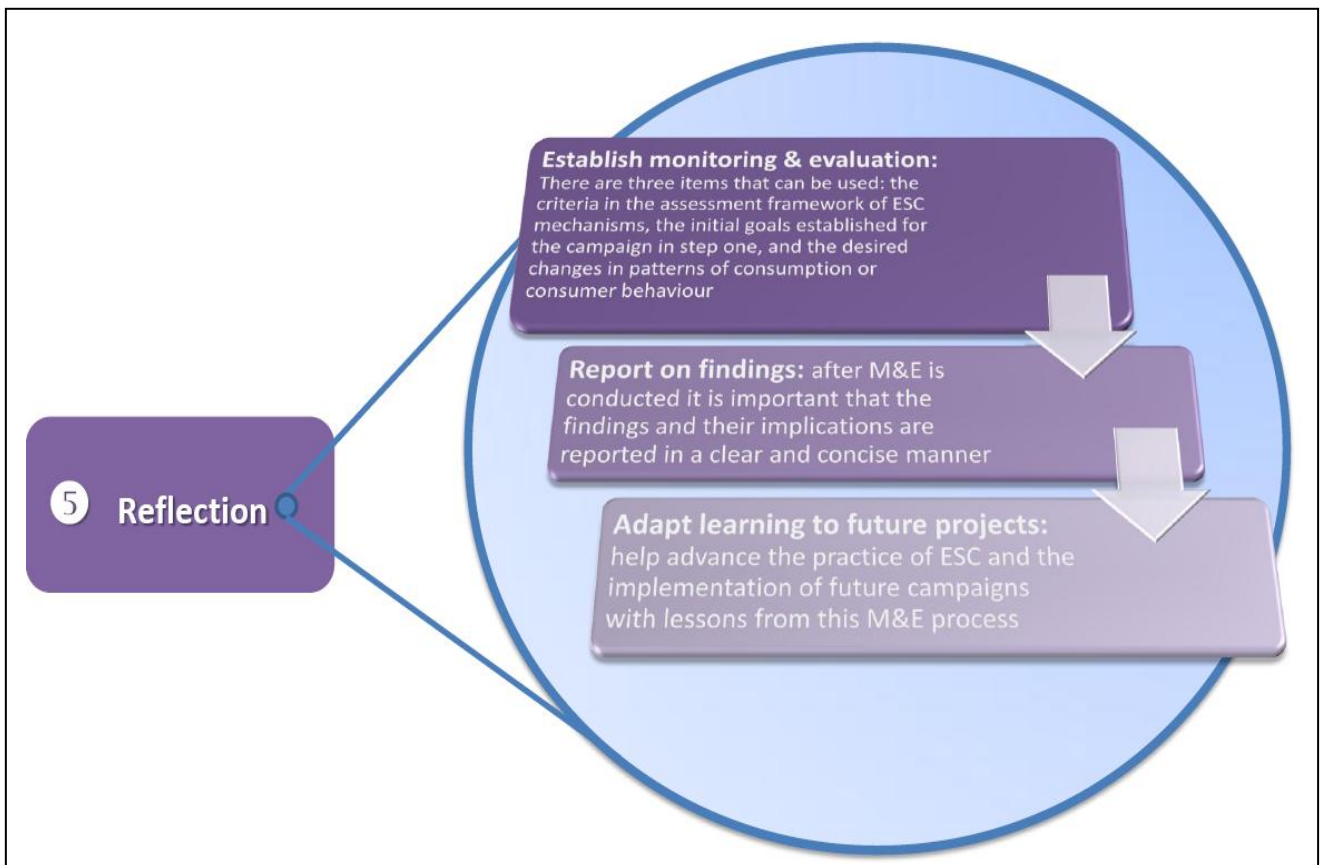
**Step Four – Securing Implementation** includes the final efforts needed to ensure the proper functioning of the campaign. This stage may be quite brief, and is a review process to ensure that the action plan includes appropriate details for how project activities are to be implemented and carried out. There are three actions included in this step: i) prepare schedule of action, ii) detail management of each action step, and iii) allocate appropriate resources. The first action, prepare schedule of action, is to make a practical calendar of when the various project activities will start and finish. The second action, detail management of each action step, should identify for each activity who will take responsibility, what should be completed/achieved and how it should be managed. The third action, allocate appropriate resources, must consider what type of resources (i.e. funding, manpower, media sources, etc.) that will be needed and assure that they are appropriately secure throughout the project cycle. These three actions should result in an action plan with clear details on how each activity will occur, and at this point implementation of the consumer ESC campaign is well prepared.

**FIGURE 14.5 – STEP FOUR: SECURING IMPLEMENTATION**



**Step Five – Reflection** is a final stage and completed after the implementation of the campaign, however its consideration during the early steps is often helpful and some efforts to secure monitoring and evaluation directly into the action plan can be beneficial. When the campaign is lengthy, it may even be appropriate to incorporate several rounds of reflection to help adapt/improve later efforts of the campaign. There are three basic actions that should be included in the reflection step: i) establish monitoring and evaluation system, ii) report on findings, and iii) adapt learning to future projects. The first action, establish monitoring and evaluation (M&E) system, is of course the most crucial and most complicated of this step. There are three items that can support the establishment of an M&E system: the criteria in the assessment framework of ESC mechanisms, the initial goals established for the campaign in step one, and the desired changes in patterns of consumption or consumer behaviour (this could include the five values of environmental citizenship). The second action, report on findings, after M&E is conducted it is important that the findings and their implications are reported in a clear and concise manner. Finally, the third action, adapt learning to future projects, is to help advance the practice of ESC and the implementation of future campaigns through lessons learned from this M&E process.

**FIGURE 14.6 – STEP FIVE: REFLECTION**



The purpose of this strategy is to provide a basic outline of the holistic process that leads to the development of a consumer education campaign that will achieve success in advancing the proactive participation of individuals in sustainable consumption. This strategy can be applied across a range of topical issues, such as energy-saving or waste reduction. It can also be adapted to projects of different size, though naturally the larger the project the more developed the plans will be and thus the more in depth the various review and reflection processes will need to be.

The conclusions from the research of ESC practice cases also highlights the need to advance “Educational Instruments” in general to incorporate value learning and the promotion of behavioural change. Furthermore, it is recognised that dealing with social, cultural and psychological drivers of consumption are important areas to focus on in ESC initiatives in order to engage directly with consumers and to establish a sense of individual responsibility for sustainable consumption. At the same time, “Regulatory” and “Economic Instruments” can have an important place in creating enabling conditions for sustainable consumption and encouraging initial contemplation of these options.

### **14.3 Considerations for Future Research**

This chapter presents a framework for understanding and assessing ESC initiatives. The case analysis presented here provides validation to the usefulness of this framework. However, to provide substantive conclusions on the long-term effectiveness of specific actions on the individual aggregate criteria of this framework, it would be necessary to conduct prolonged studies of consumer practice in light of specific policy measures since the overall goal of ESC is to affect changes in consumer behaviour.

*For Researchers* – future research would benefit from a series of case studies on ESC practice that incorporates surveys/studies of consumer behaviour prior to, during, and after the implementation of the given case. Research on the prolonged influence of ESC on consumer behaviour aimed at identifying good practice means to secure “maintenance” and “catalyse” shifts in socio-cultural habits would be particularly helpful. Finally, special consideration should be given to importance of influencing social and cultural patterns of behaviour and creating impacts for paradigm change aimed sustainable practice in such research.

*For Policy Decision-Makers* – as the limited case studies presented here help to extend a framework for assessing ESC, more in-depth research applying the identified aggregate criteria could help to strengthen the promotion of the strategy for planning ESC. Future research would benefit from a study of the various Tools and Instruments in the fifth mechanism and their correlation with the components of the other mechanisms. There is a limited indication that when “Regulatory Instruments” are the primary tool utilised it is difficult to engender the value of “Responsibility” as may be the relationship in many of the Chinese cases. A fuller investigation into the linkage between improving “Educational Instruments” and influencing “Psychological Motives” would also prove beneficial.





## APPENDIX A: THE PHASES OF A SOCIAL MARKETING PROCESS

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(adapted from the Social Marketing National Excellence Collaborative, 1997)





## APPENDIX B: ASSESSMENT OF THE APPLICATION OF ESC MECHANISMS IN CASES

	Categories of Analysis					<u>Total score</u> out of 52
	Systematic Development	Behavioural Change	Value Promotion	Technical: Tool/Instruments	Social Infrastructure	
Potential Score:	out of 10	out of 10	out of 10	out of 10	out of 12	
<b>Selected Cases</b>						
C1: Green Campus Project	2	3	2	2	2	11
C2: Cool China	5	4	5	6	3	23
C3: Tackling White Pollution	8	4	4	6	7	29
C4: Energy-Saving Project	6	4	2	2	8	22
C5: Reduction from Beginning	6	4	4	5	5	24
J1: Eco-Action Point programme	5	6	4	2	6	23
J2: Green Explorer	4	5	4	5	3	21
J3: Green Purchasing Network	4	5	4	6	5	24
K1: Half Waste, Double Recycling	5	4	4	6	8	27
K2: Sustainable Consumption Campaign	4	3	2	4	5	18
K3: Green Shop Movement	6	7	6	5	6	30
Average Chinese Score	5.4	3.8	3.4	4.2	5	21.8
Average Japanese Score	4.33	5.33	4	4.33	4.67	22.67
Average Korean Score	5	4.67	4	5.00	6.33	25.0
Overall Average	5	4.45	3.73	4.45	5.27	22.91



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