DRAFT

A Matter of Trust: The Role of Consumer-Citizens and Civil Society for Charting Transitions Towards a Green Economy

Marlyne Sahakian

Graduate Institute of International and Development Studies, Geneva

The **United Nations Research Institute for Social Development** (**UNRISD**) was established in 1963 as an autonomous space within the UN system for the conduct of policy-relevant, cutting-edge research on social development that is pertinent to the work of the United Nations Secretariat; regional commissions and specialized agencies; and national institutions.

Our mission is to generate knowledge and articulate policy alternatives on contemporary development issues, thereby contributing to the broader goals of the UN system of reducing poverty and inequality, advancing well-being and rights, and creating more democratic and just societies.

UNRISD, Palais des Nations
1211 Geneva 10, Switzerland

Tel: (41 22) 9173020
Fax: (41 22) 9170650
Email: info@unrisd.org
Web: www.unrisd.org

Abstract

This paper explores the role of households in charting transitions towards a green economy and argues for a context-based approach that seeks to understand the social dimension of societal change. Based on research conducted in Metro Manila, the Philippines, this paper begins with an assessment of household consumption patterns which points to the relevance of reducing energy consumption in this context. A tension is revealed between what types of transitions are needed and what is expected of households: there is a strong tendency towards the over-individualization of environmental responsibility, a focus on the consumer over the citizen, and the dissemination of oftentimes moralistic messages – a trend that is not unique to the Philippines. In Metro Manila, trust emerges as an important factor in assessing the social capital of certain key actors who might play a role in charting transitions to a green economy: general mistrust of the public sector in means that a different approach to policy changes might have to be considered, one that builds on existing social networks. While this research based on the Filipino context, the approach and findings are relevant to other localities and emphasize the need for a deeper understanding of social and institutional contexts.

Introduction

The recent focus on the development of "green economies" re-awakens the technological optimism of the late 1980s, which placed an emphasis on cleaner production systems, eco-design, and eco-efficiency, towards the goal of decoupling economic growth from environmental degradation. While investments in greening production systems are an important piece of the puzzle, technological optimism can sometimes lead to the notion that "solutions" are readily available, and that society either acts as a barrier or a catalyst for their "uptake". This paper provides a more nuanced approach to understanding potential solutions, be they new technologies or new policies, and the important role that can be played by households in charting transitions towards a "green economy".

Research for this paper is based on fieldwork conducted in Metro Manila, the Philippines, in relation to household energy consumption and how transitions to decreased patterns of energy consumption might be made possible. A focus on the national capital region of the Philippines is relevant as cities are poised to play an important role in leading the way towards a green economy (UNEP 2011). In addition, urban population growth is expected to be concentrated in less developed regions, particularly in Asia – home to eleven mega-cities, or cities with a population of at least 10 million (UNDESA 2010). Policy makers will increasingly be faced with the challenge of anticipating the resource requirements of growing urban populations, particularly as increases in affluence often translate to a moving-up on protein and energy ladder.

Consumption is defined here as the purchase and usage of products and services, at the nexus of environmental studies and social studies. On the one hand, there is a need to determine existing consumption patterns and priorities for better resource management. This requires a biophysical understanding of consumption that considers the environmental impacts of resource usage over life cycles in a systemic manner and at different scales. On the other hand, it is also critical to grasp consumption practices or a social understanding of consumption, one that sees all human and economic activity as embedded in social relations and systems (building on the 1944 work of Karl Polanyi). However, once resource consumption patterns and practices are better apprehended, what actors should be involved in transitions towards greener economies and in what way?

Researchers have referred to the need for a "triangle of change", or transitions towards more sustainable consumption patterns made possible through the collaboration between three entities: government, business and consumers (Sanne 2002; SDC 2006). Collaboration between the private and public sector, as well as the involvement of civil society, is often seen as the foundation for transitions to greener economies, which imply a reduction in fossil-fuel consumption. In the case of coal-dependent electricity reduction among households of different socio-economic standing in Metro Manila, the Philippines, this paper will present the challenges and opportunities of engaging multiple stakeholders.

Trust emerges as a key factor. While in certain European countries, such as the UK, consumers are prepared to let policy-makers take the lead in setting measures for more sustainable forms of consumption (SDC 2006), other countries may present a very different landscape. In Europe, people have generally been found to be deeply attached

to democracy as the most acceptable political system, but there is also growing mistrust of political procedures and institutions particularly in Eastern Europe[1] (Dogan 2002). In Southeast Asia, however, political distrust is more deeply entrenched: "Political parties, state bureaucracies, legislatures, and security forces are widely dismissed as corrupt and inefficient" (see Dogan 2005: 82). While this paper is based on fieldwork in the Philippines, it may provide insights for other similar contexts.

The structure of the paper is as follows: the concepts used to analyze research results are briefly presented, followed by an overview of research methods and the research sites in Metro Manila, the Philippines. Energy consumption trends are then presented, followed by research findings. The conclusion will open up a discussion around the issues raised and how these might be relevant to green economy transitions other contexts.

Conceptual framework

Consumption studies have a long history of interest by those working in the social sciences, be they economists, marketers, anthropologists or sociologists. In 1898, Veblen famously coined the term "conspicuous consumption" to describe the display of wealth as a source of power. In the 1970s and 1980s, there was renewed interest in cultural and social aspects of consumption, with perhaps more of an accent on the cultural: understanding the symbolic attributes of products became popular (Baudrillard 1968; Douglas and Isherwood 1979; Appadurai 1986). Incidentally, in the same period, and in the international public discourse around environmental sustainability, there was increased optimism around technical solutions to ecological issues (WCED 1987), what can also be seen as a form of product fetishism. This explains the historical focus on sustainable production (cleaner production, life cycle assessments, eco-design, etc.) over sustainable consumption.

What is interesting, however, about many of our everyday consumption practices, is that they are habitual or routinely, and very much inconspicuous. This is the case with household electricity consumption. We do not wake up in the morning saying, I look forward to consuming some energy today. We may turn on the lights, brew coffee, toast bread, and all these things become part of our "waking up" routine. Some of this is about the workings of our individual cognitive processes, some of this is about social norms and habits, and some of this is about what types of technologies are available and what these products mean to us. This is why a social practice approach has become popular in sustainable consumption research circles in recent years (see Shove 2003; Warde 2005; Røpke 2009; Spaargaren 2011), building on the work of by Pierre Bourdieu (1979) and Anthony Giddens (1984), and later Schatzki (1996) and Reckwitz (2002).

Rather than focus on atomized individuals and atomized products and technologies, the study of social practices considers discourses and actions that are help together by different dimensions such as the social (social norms, institutional frameworks, cultural meaning, etc.), as well as the cognitive (involving individual decision-making processes, and habits and routines), and also the material world. This is not to suggest material determinism: physical structures and technologies can hold together certain

---

[1] There is a growing sense of mistrust particularly in Eastern European countries: in the 2000 Gallup Millennium Survey, respondents from Romania, Lithuania, Latvia and Poland all indicated that the word "corrupt" best described the essential characteristic of their government. In Western Europe, respondents from Ireland and Italy also described their governments as corrupt.

practices, but it is also practices that shape these material dimensions – a viewpoint that sees the social dimension of technological innovation, for example. To summarize this brief introduction to social practice theory, consumption in this paper is seen as a biophysical activity, or a using up of resources, as well as a form of social and cultural practice made up of actions and discourse.

This paper also focuses on how environmental issues are perceived and interpreted in discourse, making environmentalism a subject of cultural and social study. For Kay Milton (1999), environmentalism is also characterized by a 'transcultural' discourse: environmental messages are communicated throughout the world by and between actors, including the public and private sector, but also environmental organizations, all at different scales. For some, this discourse is being increasingly controlled by large transnational institutions (Brosius 1999)[2]. From a cultural perspective and as part of transcultural discourse, environmentalism is therefore linked to the notion of globalization – understood here as the heightened flow of people, remittances, images and ideas in recent years.

Another concept used in this paper is that of social capital, a notion also proposed by Bourdieu (1979) and defined as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintances and recognition" (Bourdieu and Wacquant 1992: 119). A link can be made between social capital and the interactions of trust and reciprocity within a group, and how this might translate into social networks able to influence societal change (Putnam 2000). In this paper, the social capital of various actors will be considered, specifically in relation to trust and reciprocity, or lack thereof. A comparative analysis of social capital and environmental management was conducted in other regions of Southeast Asia, and highlights the need for further study into the nature of social capital in this context (Carpenter, Daniere et al. 2004). This paper, while not comprehensive, provides an initial introduction to the theme of trust in charting transitions towards a "green economy" in the Philippines.

Methodology and Research Sites

This study is based on several months of fieldwork in the Philippines between 2005 and 2008, involving observations and interviews. Given the vast inequalities within Metro Manila, research was conducted among households from different socio-economic groups – from squatter communities to gated communities. The neighbourhoods of Tondo, Malate and Makati are the spaces in which research respondents were situated, as they are representative of different socio-economic groups. In Tondo, research took place in low-income housing development among a former squatter community next to the closed landfill called Smokey Mountain. The second neighbourhood in which research took place was Malate, a middle-income area on the Manila Bay. Houses and apartments were visited, as well as public spaces (shopping malls, outdoor markets, restaurants, etc.). The last neighbourhood is representative of the most affluent groups: Makati is the financial centre of Metro Manila and indeed of the Philippines, and also

---

[2] Based on ethnographic research in an East Malaysian rainforest, Brosius found that the environmental discourse was increasingly being shifted away from what he calls a moral or political imperative, and appropriated by an institutional apparatus that is enveloping grassroots environmental movements with governmentality, managerialism, and bureaucracy. For Brosius, this shift is not innocent and is an attempt to control the discourse in favor of large transnational institutions and "moderate" environmental organizations such as WWF and IUCN (Brosius 1999).

includes gated communities. Houses and a luxury apartment were visited during research, in addition to public spaces.

Both semi-structured interviews and observations were used towards understanding consumption practices and social capital among households in Metro Manila. For all interviews, questions ranged from attitudes towards lighting, cooling and transport, to energy, electricity and environmental issues more generally. Interviews were transcribed and, along with field notes and photographs, these written and visual records served as the primary material for research analysis. Interview transcripts were supplemented with material drawn from online resources that discuss environmental issues in the Philippines. "Environmentalism" in public discourse is thus analyzed, including the types of messages on environmental topics – and more specifically energy reduction – communicated formally by public and private actors. Based on interviews with consumers, the tension between environmental messages and consumer practices is made evident.

Context: Energy consumption in Metro Manila

The goal of this section is to present energy consumption patterns in Metro Manila, or what biophysical and quantifiable energy flows are most significant from an environmental perspective and at the household level. Opportunities for transitioning towards energy reduction among households will then be identified, both in terms of what can be done at a policy level, and how households might be engaged in lowering overall energy consumption.

According to the International Energy Agency's (IEA) 2009 World Energy Outlook report and under a Reference Scenario that assumes no changes in current public policy, Southeast Asia's energy demand is expected to expand by 76 per cent in 2007-2030, or at an average growth rate of 2.5 per cent – much faster than the world average rate (IEA 2009). In this context of growing demand, the dominant fuel of the power sector is expected to be coal. The Philippines is no exception: from a policy perspective and in charting transitions towards a greener economy, reducing the dependence on imported fuels including coal is a priority, in addition to drawing more renewable energy sources into the grid.

Metro Manila draws electricity from the Luzon energy grid (the northernmost island of the Philippines), more dependent on coal and natural gas than other parts of the country. In Luzon in 2007, coal-powered energy represented 33 per cent of power generation (Republic of the Philippines 2007). According to recent reports developed for the Kyoto Protocol's Clean Development Mechanism, the emission factor for the Metro Manila grid is 0.557 kilograms CO_2 equivalent per kilowatt hour (kg CO_2e/kWh) for the Manila grid (NSO/DOE 2004), slightly higher than the national average. Household electricity use, and associated CO_2 emissions, have both increased several-fold in the past few years (Sahakian and Steinberger 2011). At the national level, based on a 2004 Household Energy Consumption Survey with data collected among 17 million households nationwide, 88 per cent of all households rely on electricity as a major source of energy, an increase of 3.7 per cent between 1995 and 2004 (SSC-CDM-PDD 2009). Electricity consumption continues to increase per capita despite rising utility costs since the 1970s (Garcia, Madegdeg et al. 1994).

Phasing out inefficient technologies such as energy-greedy appliances would be another necessary step for moving towards a greener economy, particularly in Metro Manila, where higher incomes often translate to higher rates of electrical appliance ownership. However, efficiency does not always lead to overall energy reduction due to what has been called the rebound or ripple effect (Hertwich 2005). In the case of the switch to compact fluorescent lamps (CFLs), for example, certain research respondents in Metro Manila said that they increased the overall amount of light fixtures in their home precisely because of the energy cost savings associated with each CFL unit (other social factors were also cited for increases in lighting needs, based on perceptions of what is "normal" and "comfortable" lighting for reading and working. See Sahakian 2010).

In addition to a shift away from fossil fuels in the electricity mix and more efficient appliances, households may also have a more direct role to play in reducing energy consumption. One way of achieving a shift in policy measures that would promote a greening of the electricity grid and incentives for more efficient technologies could be through consumer advocacy and lobbying. For Richard Wilk, norms regarding consumption patterns can be brought out into the contested area of discussion that Bourdieu calls "heterodoxy". But in order to challenge current policies and institutional practices that favour fossil-fuel energy sources, for example, consumers must also gain a better understanding of energy issues. Those interviewed had very little understanding of the abstract notion of energy provisioning, and this lack of knowledge concerning electricity products is not unique to the Philippines (in a 2006 survey among Geneva households, almost 40 per cent indicated that they didn't know what type of electricity is available to them at home, see Weber, Baranzini et al. 2009).

In terms of actions for curbing energy consumption in the home, research on energy consumption has pointed to the need to understand its social and cultural services (Wilhite and Lutzenhiser 1999) or the secondary services (Sahakian 2010; Sahakian 2011; Sahakian and Steinberger 2011). Using the example of air-conditioning in Metro Manila, various secondary services were identified beyond the primary service of cool air: air-conditioning units are seen as blocking out outdoor air pollution and contributing to indoor air quality; air-conditioning is preferable to opened windows when personal safety is an issue; units were found to be a status symbol for certain people in the growing middle class; others in the more affluent socio-economic groups were observed using air-conditioning in order to adhere to Western fashion trends, such as the wearing of wool and cashmere in the "fall/winter" season despite a tropical climate[3] (Sahakian and Steinberger 2011).

In this section, a context is provided for understanding energy consumption among Metro Manila households. We have seen how the electricity grid relies mostly on fossil fuels and that reductions in energy usage would involve institutional change, such as a greening of energy sources, but also more efficient technologies and appliances. Consumer-citizens could play a role in pushing for institutional change, in addition to questioning and changing their own habits and social norms when it comes to using energy-greedy appliances, such as air-conditioning. In the following section, we provide research results to address the main question of this paper: given the current energy consumption context in the Philippines, what are the opportunities for environmental

---

[3] Temperatures in Metro Manila range between 30°C and 37°C throughout the year, with higher temperatures relative to surrounding due to the in addition to an urban heat island phenomena. City temperature can be up to 10°C warmer than surrounding rural areas in adverse conditions (Estoque and Maria 2000).

action through multi-stakeholder engagement and towards overall energy reduction in Metro Manila?

Research Results

In order to establish what opportunities exist for environmental action in Metro Manila specific to energy reduction, the first subsection below provides an overview of the types of messages delivered by various public and private actors communicating around this theme in the public sphere. Through this discourse analysis, the tension between individualism and collective action is highlighted. We then consider the role of different actors, including the private sector, the public sector, and finally social networks.

Environmental discourse on energy in the Philippines

In the following section, the discourse by various actors involved in environmentalism is analyzed, including non-governmental organizations (NGOs), as well as the private and public sector. The focus is being placed on messages regarding an environmentally friendly consumer lifestyles and specifically energy reduction or conservation strategies directed towards households. In an analysis of informational materials by various actors involved in energy issues in Sweden, researchers found that the discourse of both energy providers and environmental actors tended to place an emphasis on individual choice and individual responsibility. Energy savings was communicated around the idea that the individual is central to change (Gyberg and Palm 2009). As can be seen below, this is very much the case in the Philippines as well.

Two of the larger organizations that dominate the environmental protection/conservation landscape are WWF Philippines and Haribon, a local foundation. According to its web site, "Haribon practically gave birth to the Philippine environmental movement. Hatched in 1972, the organization, and the individuals it trained and nurtured were instrumental in the formation of other environmental organizations in the country" (Haribon Foundation 2011). Haribon is engaged in corporate partnerships that include Meralco, the country's largest electricity distributor and sole distributor for Metro Manila, and the National Power Corporation (Napocor), responsible for electricity generation. On the Haribon web site, a section regarding "taking action" is limited to opportunities for donations and volunteering around conservation efforts.

The WWF Philippines panda mascot is a familiar symbol in the Philippines (and elsewhere around the world), and the organization also enlists support both in terms of membership fees and volunteerism. Its donor base includes major local brands such as the Bank of the Philippine Islands (BPI), Coca-Cola, Cebu Pacific airlines, Nokia, Philips, Lafarge and HSBC, with whom they partner with on a number of projects. Through their web site and Facebook page, they encourage web visitors to live more environment-friendly lifestyles with a series of tips that range from how to shop, to how to use appliances in the home. "Use your consumer power" is one of the headlines, including what has been called elsewhere options for either boycotting or boycotting – the former being the use purchasing power to favour environmentally-friendly products, or in the case of the latter, to avoid purchase (Boström and Klintman 2008). For both Haribon and WWF, corporate partnerships are a recent phenomenon.

In addition to these two main institutions, a multitude of environmental organizations exist in the Philippines, including Mother Earth and the Green Army network, both of which cooperate with the national Department of the Environment and Natural Resources (DENR). The Green Army offers what it calls 101 Tips for Greener Lifestyles, of which only four are under the title of "environmental advocacy" (Green Army Network 2010). Here, readers are encouraged to attend seminars on environmental issues, "share with family and friends, especially kids, the need to protect the environment" and be involved in environmental legislation. No guidance is given on how people might go about doing any of this. The fourth recommendation under that section is to donate to an environmental cause.

In the first section, "Green Energy and Air Quality Management", recommendations concern the using of electrical devices in the home (switching off lights and unplugging devices when not in use, for example). Tip number 12 suggests "Ride a bike or walk when going short distances" while tip 26 advises to "Give up smoking. Or at least, do not smoke in enclosed spaces". There is no indication of what the priorities might be, from a biophysical perspective; clean air management is presented as being the responsibility of smokers; and finally, recommendations for walking and riding bikes fail to recognize the vast distances involved in daily transits through Metro Manila and near-impossibility of riding a bicycle in intense traffic conditions (and the personal safety risks for female bikers), or what has been called structural lock-in (Sanne 2002).

Mother Earth, however, takes a specific approach to environmentalism: the organization focuses on waste recycling at the *barangay*[4] level, which is the smallest system of governance in the Philippines or form of socio-political organizational that can include a community of a few hundred households. Achieving what it calls a "zero waste" lifestyle in the Philippines involves "empowering *barangays* to become self-reliant through holistic environmental education and community participation; and, taking a position consistent with sustainable ecological laws, policies and issues while maintaining smooth and harmonious relationships with all stakeholders." (Mother Earth 2011). This organization has been very successful in implementing its waste management programs around the country.

Regarding the private sector and energy conservation specifically, the Meralco web site provides a Meralco Appliance Calculator (M.A.C) tool to help individuals better manage electric bills and assess the cost of various household electrical devices (Meralco 2011). On the Shell Philippines web site, energy saving tips include turning down heating one hour prior to going to sleep – a gesture that seems irrelevant in Filipino climate. The tips are based on things that can be done around the house, such as using energy-saving light bulbs (Shell Philippines 2011). Efforts are underway in the Philippines to introduce codes and guidelines for energy efficient buildings, although these messages are not targeted to the general public as of yet.

In late 2010, the Philippine Green Building Council issued a guide called Building Ecologically Responsive Design for Excellence (BERDE) for the new construction of commercial buildings; the residential manual is scheduled to be finalized by mid 2011 (PhGBC 2010). This comprehensive guide uses sustainability indicators (economic, social and environmental). Regarding energy and construction, for example, guidelines are provided for energy metering, energy efficient lighting, ventilation (50 per cent

---

[4] The etymology *barangay* is derived from a Malayo-Polynesian vessel called *balanghai* or *balangay*, which brought Filipino ancestors to the shores of Panay, an island in central Philippines (Høgsholm 2007).

natural ventilation requirement), on-site energy generation, overall energy reduction to 200 kWh/m2 per year, energy efficiency for the building envelope, among others. Many other factors are taken under consideration, from the proximity of the building to public transport and availability of bicycle lanes, to what is called "heritage conservation" and includes the use of local materials and respect for the surrounding natural environment.

The Philippine Green Building Council has played an active role in promoting energy efficiency in buildings for the past several years by engaging with various stakeholders in both the private and public sector, but also by conducing workshops across the Philippines targeted to academia, housing developers and architects. The academic environment remains an open field for integrating ideas of energy efficiency (and reduction) into the curriculum; for example, energy efficiency in buildings is not a core part of current architecture curriculum. The success of the BERDE has yet to be determined. Building construction specifically presents a difficult situation: many of the prospective homeowners in the Philippines work overseas and only buy finished homes (as various schemes to sell houses based on plans have lead to hijacked investments); building developers, however, will not risk investing in energy-efficient buildings as they try to minimize their investment costs and risks in a housing market that represents very low profit margins (see Sahakian 2011 for more details on this topic).

Tension between individualism and collective action in environmental discourse

As we have seen above, much of the information directed to general consumers in the area of environmental sustainability or more specifically energy conservation seems to be focused on the need for individuals to change specific actions. This is not unique to the Philippines and is a more global phenomena: Stewart Barr et al. note that this "reliance on individuals as the key agents of change was outlined extensively in 1992 in the pages of Agenda 21 and the European Union's Fifth Environmental Action Plan Towards Sustainability, and more recently by the United Nations." (Barr, Gilg et al. 2005: 361).

In addition, very little emphasis is placed on the need for collective action to help push for vaster institutional change. One related issue is that no sense of priority is given to what types of activities are most significant from an environmental perspective. Not surprisingly and in interviews, there seems to be a sense of confusion regarding what "environmentalism" entails, and the actions required for transitioning towards a more environmentally friendly society. As a young man and photographer in Malate explained: "I can't be an environmentalist. I smoke, I drink. If you're going to do something, do it well". During the interview, his girlfriend also added: "You would have to have a totally organic diet". For this couple, protecting the environment means having a healthier personal lifestyle.

A woman and mother of one in Malate went further by linking food consumption to the question of energy-intensive food transport: "We try as much as possible not to buy things that have travelled so far. Unfortunately, we love… we really like good meat. But lately I've been buying the local, I think it's local… I hope they are." This respondent recognizes that meat consumption is energy intensive (particularly in the Philippines, where meat is often imported from Australia), but that she is unsure as to whether so-called local labels truly come from nearby producers. Her comment reflects a general mistrust of food provisioning chains.

When asked what he thought about the environmental situation in the Philippines, a taxi driver from Tondo responded: "Getting worse, the pollution (…) What do you call it, that one that blocks the sun? Ozone layer. There's no ozone layer in the Philippines. Because of the plastic bags." At the time, environmental organizations had been promoting a switch from plastic bags to reusable bags. The taxi driver had linked the topic of plastic bags to the issue of ozone depletion, which gained significant global press attention in the 1980s and 1990s. Another man from Makati was asked if he unplugs electrical devices after use, or leaves them on sleep mode, to which he responded, "I turn them off. Because I watch television but it uses electricity, and it is not very, very good for the ozone or something like that?" Other research respondents confused global warming and ozone layer depletion[5].

A woman from a middle-socio economic group complained her efforts to use energy-efficient light bulbs, such as CFLs: "It's always a Catch-22. You use CFLs, but you don't know how to dispose of them." Indeed, while public policy has been pushing for a switch to CFLs around the country, the proper disposal and waste management of these devices is yet to be seen (see Sahakian 2010), leading to frustration as to whether a personal effort is relevant.

In addition to misunderstanding environmental priorities and mistrusting claims, research respondents from Malate also expressed frustration at confronting their own personal environmental values (and actions, in some but not all cases) to those of others. One young woman explained her experience of hiking with members of her family:

> So after hiking for half an hour we reached this really nice forest with a spring and waterfall and then they, they had brought some chips with them, so they started to eat the chips and then they just started to throw the chip wrappers in the water. And you can imagine my horror when I could see such beautiful rocks and spring and then you see the bags of chips just floating away. Why can't you just place it in your pocket you know? And they noticed that I was putting my own pack in my pocket. They were saying, "Why did you do that?" They asked me why I wouldn't throw it in the water and I said, "Because I prefer not to pollute the environment" and it's just something that hasn't really been transmitted very systematically to the general populace.

In explaining why she chooses not to litter, this woman told me that she had had, in the past, a French boyfriend; what she called "a very ecological guy". Through his influence, she began to be more aware of environmental problems, including littering. She was also exposed to environmental messages on her university campus. Another ex boyfriend, a Filipino lawyer, would tell her that her environmental actions didn't matter. He claimed that individual actions didn't make a difference. On the question of littering, for example, his opinion was that the lower-socio economic groups and waste scavengers would pick up the recyclable waste anyway. In several interviews, the idea that street litter was actually beneficial to these groups was common.

---

[5] In a 2002 survey, 47 per cent of Americans believed that global warming is primarily caused by damages to the ozone layer (quoted in Leiserowitz 2007). Confusion between these two topics was also found in a cross-cultural study of household energy consumption in Norway and Japan, see Wilhite, Nakagami, Masuda, Yamaga and Haneda in Miller 2001: 169).

Returning to the research respondent and her former French boyfriend, she expressed the sentiment that he sometimes went too far with what she called his "militant" environmental stance.

> … he would insist on biking under the hot sun to get someplace, inhaling all the fumes, and in your skirt you know (laughter). Another thing he would say he wants to boycott yogurt and all that. And I love yogurt (…) sometimes when I can afford it, I buy yogurt and he would get all grumpy and say 'Oh do you realize the packaging and the way it's made, it's really harmful to the environment'.

Making personal choices that are aligned with environmental goals are complex, perhaps because there are no key messages that help prioritize the most significant aspects. For this young woman, living in an environmentally friendly way is about finding a personal balance, "not too much out of the comfort zone." As she stated, "some people, people who become vegetarian, it's also for saving the planet. It consumes so much water and other resources to eat meat, for example. I'm not there yet, I'm not at that point yet and I think it would be hard for everyone to just give up meat." In her words, it seems that saving the planet requires certain personal sacrifices and individual endeavours. The need for broader social and cultural change was not brought into question.

Environmentalism seems to be tied up with moralistic messages, or what should or should not be done – or convictions of what is right or wrong in different contexts. Environmental campaigns are called "Save the Planet" or "Save Palawan Island". A woman active in environmental efforts explained the work of Mother Earth Philippines as "really preaching about zero waste". She describes them as a "very devoted group", using language with religious undertones. For one woman, the partnership between WWF Philippines and Cebu Pacific Airlines – that allows passengers to donate funds to carbon capture campaigns such as tree planting – is directly linked to a religious theme, as she explains: "That's what I said; the new indulgences are carbon credits. It's very Catholic (…) Can you imagine, I'm going to hop on a plane, but I'm going to buy carbon credits and it's ok."

Perceptions of the private sector involvement in "green" initiatives

Over the past several years, the word "green" has appeared in the media landscape of the Philippines: billboard announcements, web sites and press advertisements have begun to add the word "green" to marketing and promotional messages. The term "greenwashing" has been used around the world to describe a type of public relations or marketing strategy that provides the misleading perception that a company's policies, products or services are environmentally friendly. But even experts in sustainability differ on what "green energy" consists of: James Lovelock, the environmental scientist who proposed the Gaia hypothesis (Lovelock 1972), considers nuclear energy to be green – a question that is contested by organizations such as Greenpeace, among others.

As described earlier, efforts are underway by the Philippine Green Building Council (PhGBC) to create standards and guidelines for more energy-efficient buildings. Currently, housing structures in the Philippines tend to emulate western housing styles that are inappropriate for the local climate and these types of housing structures and appliances can lock-in higher energy consumption rates for years to come (Sahakian

2011). However, "green" messages have already found their way into promotional materials for new housing developments.

A WWF Philippines director explained how housing developments in the Philippines are "marketed as green because they have trees and parks" and not because they are energy efficient in any way. A member of the PhGBC and architect explained, "In the last couple of months, especially with energy going crazy, everyone started looking at going green. And many started claiming that they were going green when actually they were not." Later in the interview, he continued:

> … there are many developers who are marked as going green because they put in plants. So you see Live green in whatever Portabello, and they put an Italian-looking villa, and they put a golf course and plants all over the place, and they put in the newspaper, Look that's a green way of living with the leaves and what not. And the consumer not knowing the difference they swallow all this now. And when you talk about energy, they are like, what are you talking about?

Explaining energy and more generally resource consumption can be a daunting task, whereby greenwashing is relatively easy: it involves communication, not a change in policy or processes. The head of a design agency in Metro Manila explained how public relations agencies were briefed on including green messages in their communication strategies:

> No, no, it's something else. The thing I was just showing to you, that's why it's all green, because it was the uh, the, public relations organization of the Philippines, it was a seminar, conference, for all the companies who do public relations (…) It was a seminar conference to show them how to use sustainability as a tool for public relations for companies.

In the Philippines, there is the perception, however, that the private sector can be trusted – as opposed to the public sector, as we will see in the section that follows. For one research respondent, the private sector is seen as "saving the economy". The private sector is generally perceived as being more efficient than the public sector in the Philippines. Indeed, the financial district and gated communities of Makati, where private sector interests play an important role in infrastructure development and city management.

Gated communities are generally seen as being better-managed and indeed safer than non-gated communities. The private sector is seen as better managing household waste than municipalities, for example. In this explanation by one woman explained, it would seem that the private sector and wealthier populations have the resources and interest to keep their communities clean, while it is the poor that are contributing to waste disposal in urban areas:

> I'm not putting up Forbes Park (a gated community in Makati). I really don't like that whole concept, but of course, they have money, and they have resources, and so they have zero waste, and all those matronas are saying let's not use plastic. Meanwhile people from another social strata, they will buy all fast food stuff, right and they'll through it on the streets, and nobody will clean up.

Turning now to the question of the energy sector specifically, Meralco – Metro Manila's sole energy distributor – is not necessarily a trusted brand in the Philippines. While the company was a source of national pride in the 1960s as one of the first companies to run by an entirely Filipino board of directors, Meralco is now owned by the Lopez family described as such by a young man and political activist from Malate:

> (They) are held in high regard but not lily white (…) they were accused of abusing their power over the media to bring down the Marcos'. They are also accused of not paying taxes and manipulating energy costs. We have the most expensive energy in Southeast Asia because of their incompetence.

The family who owns Meralco is seen as abusing their power, and the brand Meralco itself has been associated with corruption practices. Meralco is blamed for the high cost of electricity in Manila. One interlocutor from Tondo explained "Too expensive. They are putting so much taxes or whatever add-ons to the bill to cover their losses maybe", stating the general sense that all system losses are passed on to consumers[6].

In a 2005 publication that presents case studies for integrated marketing, a Meralco campaign was awarded a bronze prize for addressing what is called a major challenge: various macro-economic and political factors were said to have been "leading [consumers] to the perception that Meralco is a cold, unfeeling and profit-hungry institution" (Kliatchko 2005: 136). The negative perceptions around Meralco may also be related to how our highly complex societies have disassociated consumers from a direct experience of the life cycle processes of extraction, production, distribution, usage and disposal. "Consumers in a dynamic, expansive economy are more likely to be insulated from the consequences of their choices," writes Thomas Princen. "They are left with little basis for their decisions beyond price. This insulation occurs in part through the separating of production and consumption decisions along a chain of resource decisions, what I term 'distancing'." (Princen, Maniates et al. 2002: 116). With complex supply chains, signals are rare and confusing, he continues. This also leads to what Princen calls shading, or the obscuring of costs, as these costs are sent downstream from one firm to the next.

Many consumers don't relate to energy because they may not understand it and but also perhaps because marketers have gone too far in simplifying complex messages. As the Tondo taxi driver put it, "If you see the paper [electric bill, there are] many lines. The people don't tell us this is this, or that is that. They don't teach us. Only give to you, this is your bill." Meralco also doesn't have the social capital to explain energy issues directly. In 2008, Meralco launched an advertising campaign to explain the concept of system loss to its consumers, a message that was also placed on electricity bills. A Filipina celebrity, Judy Anne Santos, was engaged as a spokesperson for the brand and used the example of a bag of ice to explain how melted water can be lost on the way

---

[6] One important issue in Manila electricity distribution is that of systems loss. As described on the Meralco web site, system loss is the total of all energy lost or wasted on a system either due to technical problems, or theft, pilferage or meter reading errors. The Anti-Pilferage Law (Republic Act 7832) passed in 1994 limited the level of system losses that a distribution utility can pass on to its customers to up to 9.5 per cent. Which means that Meralco absorbs the cost of any system loss above the 9.5 per cent limit, but passes on any costs to its consumers – both households and industry – up to 9.5 per cent. The systems loss charge appears on monthly electricity bills. All of my interlocutors had heard of systems loss and placed the blame on Meralco's inability to manage its system better.

from the store to the home, as a way to explain electricity system losses that can occur over distribution conduits. As one interlocutor explained in this transcript:

> Yeah, they got a lot of flack for that one. They got Judy Ann Santos, one of the movie stars, to explain to the public why, why we have to overcharge you. (He changes his tone to a girly tone, imitating the woman). See this bag of ice? And this bag of ice the melting water, that's the extra cost that we have to charge you for. (…) They were just trying to put perfume on their mismanagement.

The local press had a field day with this advertising campaign, with headlines reading "Anti-Meralco VACC calls for boycott of Judy: Judy has a new name, Miss System Loss" referring to the Volunteers Against Crime and Corruption (VACC), or "Stupid Judy Ann in Meralco Ad" or "Judy slammed for Meralco ad." While Judy Ann may be a celebrity, her status was not sufficiently compelling to outweigh the negative brand perception of Meralco. While the private sector is generally perceived as being more efficient in the Philippines than the public sector, the energy sector is not trusted and even called "the powers of the dark" side by a Filipino journalist and political theorist (Azurin 2008). Similar feelings of mistrust towards electrical utilities have been researched elsewhere[7].

Vertical trust relationships between people and politicians, and general mistrust of politics

Focusing now on the question of trust and the public sector, in all interviews where the topic of government involvement was raised, one word always came up: "corruption". "People are dying of TB because of pollution" a taxi driver from Tondo explained. "It's worsening. Because of corruption. Corrupt, corrupt, corrupt. No law. Only press release, press release, no action." I asked him whether he thought the government was helping the people in his community, to which responded: "Do you see all the children with no clothes, sniffing solvent?" For this taxi driver, and almost all those interviewed for the research on which this paper is based, public officials are not seen as public servants but rather as stumbling blocks for local development.

"Yeah, they think that if the government intervenes somebody is going to make a killing. Somebody is going to make a lot of money," another respondent stated, expressing his view that the general public sees political office as an opportunity for amassing personal wealth. This topic came up on several occasions. A young man from Malate explained: "being in government here means you're a money earner, not a public servant. When you say somebody is a mayor, the first thing people think here is Oh, you're rich." As another young man from Makati put it in these terms: "So everyone in government is working to make money not actually to serve the people", due to the fact that election periods need to be financed. "They only think of making money," an older man from Makati told me.

---

[7] Paul Stern provides an overview of a New York City example of energy sector mistrust: "A classic example involved a brochure on how to cut energy use in air-conditioned New York City apartments (Craig & McCann, 1978). The brochures were mailed out at random on the stationery of the New York State Public Service Commission or on the stationery of the local electric company, Consolidated (Con) Edison. In the next month, the group of homes receiving the brochures from the Public Service Commission saved 7 per cent on their electricity bills; the other group saved nothing. Apparently the messages from Con Edison were either ignored or mistrusted" (Stern 1992: 1228).

The mistrust seems to be targeted towards individuals but also political institutions as a whole. The general sense among all research respondents is that laws exist but are never implemented. One research respondent explained that media attention can place a spotlight on an issue or person that involves corruption, but that attention eventually dies down and there is no legal follow-up. The lack of legal enforcement and resulting corruption is seen as occurring at different levels, "from highest levels of government all the way down to the traffic enforcers on the streets" a young woman explained. Another woman, a contemporary artist, explains her personal experiences with corruption: a police officer issued her a ticket for stubbing out her cigarette on a public sidewalk (unlike Singapore, many parts of Metro Manila are covered with litter). Rather than avoid the ticket by paying the officer directly, as he was suggesting, she was assigned to a full day of community service, which involved cleaning toilets and typing up lists in an administrative office building. "I could have avoided it by paying him like fifty bucks" she explains, or the equivalent of one United States dollar.

When there is a sense of trust, it seems to be vertical in the Philippines, between individuals and specific political leaders. This has been called "bossism" elsewhere (Sidel 1999) and similar patterns have been found in other contexts. In Nigeria, for example, vertical relationships were found to be quite strong between "Big Men" brokers and their supporters, created closed relationships that can be called a "circle of trust" (Daloz in Dogan 2005: 157).

"For example", a young woman living in Malate explained, "we have politicians becoming godfathers at weddings and baptisms all the time. There was this president who during his three-year term was godfather to five hundred weddings at least (…) So that means that after that all these people will gain favour. Whenever they need help they are getting deals pushed through, or finding a job in government. All these things, they could always ask for the president's help."

There is a term for the relationship between an elected official and a supporter: *utang na loob* roughly translates to a debt of gratitude, *utang* being debt, and *loob* meaning the internal self or internal world. Votes are cast as debts of gratitude, in what is seen as a form of reciprocity for the financing of the supporter at a time of need, be it for a wedding or baptism, for example. "And that's how people get elected." She continued to explain. "When they say Oh that mayor, he helped my uncle get his surgery done three years ago, so I'm gonna vote for him again." A former *barangay* captain, who had served his community for eighteen years, explains how the government functions in the Philippines, in his opinion:

> But the problem in the Philippines, most of the voters are the poor people not the rich people. So the public officials they know how to play their cards, if you don't like me it's alright. I'll just aahh… pamper these poor people. And I will get my votes. So I don't care about you rich people. Go ahead and be noisy, I don't care. I'll take care of the scholarships, medical attention, and I will always attend the social gatherings to become the godfather, the sponsor, at the wedding, the baptism, (laughter) that is the Philippines (…)

When asked whether he had been a *kumpare* while in office, he explained: "I cannot say no. That is an insult to the family and these are poor people, they are inviting you, you cannot say no. So I end up becoming close to everybody, you become everybody's *kumpare*, god father."

Comparing corruption in the Philippines to that in other countries, a young woman living in Malate who has lived in the United States explained that the Filipino version is "more flashy, more immediate", providing the example of basketball courts in local communities:

> It's just that every single *barangay* has a basketball court with the local official's name on it. It's just the easiest fix, I mean basketball is the number one love in the Philippines, you know (…) I think people either don't believe in government or they just don't, I'm not sure, either corruption or they're used to government not doing anything, but they don't push them for any kind of change, you know. They will re-elect the guy that gave them the basketball court so it's also their fault.

Another young man from Makati also raised the basketball court, but this time as a symbol of misspent public funds: "Basketball courts, that's their favourite thing. With an image of the major emblazoned on the wall, that costs millions of dollars. How expensive are fifty bags of cement? I never did have any trust in government."

However, the ongoing discourse around corruption does not necessarily reflect reality, in all instances. On the one hand, people interview had very direct and personal experiences with corrupted officials usually at lower levels of administration (one theory is that underpaid civil servants are motivated by the need to supplement their modest incomes). Corruption also gains significant publicity in the Philippines on a regular basis. However, as one political activist explained, people in the Philippines also expect things to be corrupt and this becomes what he called a "self fulfilling prophecy" saying "we have a tendency to blanket all government entities with the brand of corruption".

Social networks, consumer activism and environmentalism in the Philippines

The People's Power movement that successfully ousted the Marcos regime in 1986 ushered in a new era for non-governmental organizations in the Philippines: NGOs currently play an active role in political and social life. The Asian Development Bank estimates that approximately 3,000-5,000 NGOs work specifically on development issues in the country. Many thousands more also bear the loose title of "non governmental organizations" and range from civic clubs to professional organizations (ADB 1999).

Environmentalism in the Philippines followed closely in the footsteps of the United States movement. A founder of the environmental movement in the Philippines explained in an interview: "We had our own definition of sustainability, before Brundtland. A form of development not to be interrupted by economic, social or environmental problems. We gathered multi-sectoral groups to ask, what does sustainable development mean to you? This was our preparatory material for Rio. It was a very active effort." An early employee of Haribon recalls exchanging ideas with colleagues who had travelled abroad in the early 1990s, particularly to the United States.

Environmental NGOs in the Philippines have been most effective in the following areas: coastal management, management of protected areas, wildlife protection, as well as

anti-pollution and clean-up campaigns, among others. But today, much of the force behind the civil movement that contributed to the ousting of Marcos has lost steam. For William Case, this is due to "resurgent mistrust between sectarian groups, classes, and spatially distinct populations" in Southeast Asia more generally (Dogan 2005: 84). Specifically in the Philippines, the author cites divisions between middle class activists and the urban poor as a reason for weakening civil society.

Based on my research in Metro Manila, there seem to be a multitude of "green" NGOs, but few coalitions. Haribon and WWF Philippines have the most prominent role. One reason for this may be that the support base tends to be loyal to different organizations at different times. As one interlocutor explains, the NGOs in the Philippines are made up of "same people, different causes. We just change outfits. If you come to my rally, I'll go to your rally," as one young man from Makati explained.

A former *barangay* captain explained his views on the NGOs in the Philippines:

> …there are many people who cannot work with each other, but they have good intentions. They have a proliferation of many organizations, small organizations, doing works here and there. That's why there's a proliferation of green organizations with well-meaning small groups, but very seldom do we have big groups, because they do not get along. It's the culture (…) They clash all the time in front of everybody.

Organizations with similar missions seem to have a hard time coordinating their efforts in the Philippines, and this is all the more true for coordinating consumer-citizen efforts. Consumer activism is less organized in the Philippines, as opposed to certain Western countries. The current Filipino partner of the Consumer International network is the IBON Foundation, a research institute known for its anti-government stance that tackles a very broad range of socio-economic issues. Consumer rights and advocacy is not one of their main focus areas.

For a founder of the environmental movement who has dedicated over forty years to social development and environmental promotion in the Philippines, the main issue is that a shift in thinking is needed. Rather than focus on economic benefits in a model where, for him, the enterprise is at the centre, the primary unit should be that of the community. "When your unit of organization of counting is the community, you are in a better position to put the social value on the environment than you are in the enterprise system. The enterprise system, by definition, these are externalities," drawing on what could be considered ecological economic theory.

The Philippines does have a very specific governmental unit for managing small communities in their system of *barangay*. *Barangays* have been leading an effort to better segregate and manage waste in the Philippines. These governance systems could be an interesting starting point for discussions and actions in the general area of energy consumption, as we will further consider in the conclusion to this paper.

The Internet is also a powerful social network in the Philippines. Where in the past, the Catholic Church asserted much power over the general population, for one social activist the power has now shifted online. A much younger population of active Internet users in the Philippines have embraced the power of blogs and social media including Facebook and Twitter, among others. Online resources for consumer advocacy can become quite powerful, particularly because of their reach beyond geographic

boundaries. The Philippines is one of the countries that exports the most labour in the world: millions leave the Philippines on an annual basis for work opportunities abroad, and millions more are part of the growing Filipino diaspora. As one research respondent explained, "One problem (with development in the Philippines) is migration. Many of the people who can help create a better run country are outside of the country." The Internet represents an important social space for reaching transnational actors.

Conclusion and discussion

What we have attempted to show in this paper is that transitions towards a green economy would need to involve a greening of energy sources that provision the Luzon electricity grid, which in turn serves Metro Manila. Transitions towards more energy efficient appliances at the household level are also necessary. The material dimension of consumption is therefore highly relevant, in terms of what technologies are made available, but the social dimension remains critical.

There is an expectation that households have a role to play when it comes to towards a greening of their consumption practices. This would require on the one hand a deeper understanding of energy and electricity, as well as a discussion around the social norms and household habits that maintain the perceived secondary services of energy, from staying cool to lighting in the home. The main issue today is that while attention may be shifting from production processes to consumption, the emphasis is being placed on the role of individuals towards change. This is a simplified view of what motivates consumption and one that has historically been addressed by providing information at the right price, what translates into eco-tax and eco-labelling schemes (Cohen and Murphy 2001). The consumer is often seen as an individual, the economic man or woman, making choices based on cognitive processes. One of the achievements of this approach is a raised awareness of environmental issues, yet awareness rarely translates into action and positive environmental impact (Spaargaren 2011).

This tendency to focus on the individual is compounded by the notion of 'consumer sovereignty' in certain contexts, where the state or private-sector promotes a form of 'freedom of choice that can also be seen as shifting responsibility squarely on the shoulder of consumers. Furthermore, households are often seen solely in their role as consumers – able to use their purchasing power to either boycott or 'boycott' products[8] (Boström and Klintman 2008). Purchasing environmentally-sound products and services is a limited understanding of what options are available to households, which also ignores the role of consumers as citizens, able to act within a social context to influence institutional change – a role that has been eroded over the past forty (Maniates 2002).

Based on research in Metro Manila, this paper points to a clear tension when it comes to responsibilities in relation to "sustainable development", defined as a concern for environmental issues but also social equity and economic development. The individualization of responsibility is an increasingly globalized message, directed towards households: global and local civil society organizations, and the private and public sector alike place an emphasis on individual actions. In turn, these messages are

---

[8] Boycotting is used for so-called conscious decisions to buy socially or environmentally sound products, while boycotting is avoiding products that do not meet sustainability standards. Boycotting seems to be more common, as Grégoire Wallenborn and Joël Dozzi argue, "*Il est aujourd'hui plus facile d'acheter des produits écologiques que de réduire sa consommation*" or buying ecological products today is easier that reducing overall consumption (in Zacaï and Haynes 2008: 57).

picked up in the discourse of people from varying socio-economic groups, who express uneasiness and confusion as to their role in relation to complex socio-environmental problems. This is reflected in contradicting consumption practices: biking to work but flying to exotic holiday destinations, for example, or buying organic food that is imported from distant localities, or even focusing on environmental issues rather than social issues or institutional and structural problems.

Trust emerges as a central issue in the Philippines when it comes to the social capital of public and private entities. While vertical trust relationships exist between supporters and politicians, there is a general mistrust of public institutions. Corruption is a very common word in the Philippines that is constantly pronounced in discourse regarding local politics. While the private sector is generally seen as more effective in "getting the job done", the energy sector is also generally mistrusted – and much of this may also be due to a general lack of understanding of energy provisioning and pricing among consumers, and lack of transparency by private and public actors in the energy sector, leading to what has been called "distancing" or "shading." While non-governmental organizations tend to be popular in the Philippines, both in terms of sheer numbers and membership, there is also a sense that these many entities lack the coordination to act as a unified interest group on key issues, such as the need for transitions towards a green economy.

Social networks have been proven to be quite effective, however, in this context: at the community-level, the *barangays* represent a level of organization where questions regarding household energy consumption could be debated. For this, a more long-term strategy would be needed to help educate households on questions related to life cycle thinking in order to gain a more comprehensive understanding of what are environmentally significant practices and what is meant by a green economy. *Barangays* could also help set priorities at a very local level, which could then be scaled up to the level of Metro Manila cities and districts. The Internet also offers a powerful medium for communication messages around energy reduction, both to people living in the Philippines as well as transnational audiences. There is also a need for "smart" civil society organizations that are able to "develop more effective strategies and become stronger change agents towards tackling the global sustainability crisis" (Narberhaus 2011). Effective social movements 'elsewhere' may also lead to similar movements in the Philippines, as was the case with the environmental movement of the 1970s in the United States and its influence on the Filipino environmental movement. To move towards a more sustainable society, the engagement of 'environmentalists' alone may not suffice, but what is needed is rather broader forms of civic engagement.

There is a saying in marketing and communications, that the medium is the message. Although identifying patterns of energy consumption and policy measures to curb overall consumption should be a priority, choosing the right medium for communicating these measures is equally important. In the Philippines, and perhaps in other similar contexts in Eastern Europe, the opportunity for "triangle of change" collaboration would have to be tempered: if the public sector and energy sector are mistrusted, a greater emphasis could be placed on bolstering the ability for civil society to lobby for change, and indeed discuss the need for fossil-fuel dependent energy reduction both for the country, but also in their *barangays* and their homes. Here, the discussion around energy might be taken out of the realm of "sustainable consumption" altogether and into that of rights and responsibilities, the right to clean water, clean air, and perhaps also the right to clean energy in a green economy.

References

ADB. 1999. *A Study of NGOs: the Philippines.* The Asian Development Bank.

Appadurai, A. 1986. *The Social Life of Things: Commodities in Cultural Perspective.* Cambridge Studies in Social & Cultural Anthropology, New York.

Azurin, R. B. 2008. *Power Without Virtue.* Anvil, Pasid City, Metro Manila, Philippines.

Barr, S., A. W. Gilg, et al. 2005. "The household energy gap: examining the divide between habitual- and purchase-related conservation behaviours." *Energy Policy*, Vol. 33, pp. 1425–1444.

Baudrillard, J. 1968. *Le système des objets.* Gallimard, Paris.

Boström, M. and M. Klintman. 2008. *Eco-standards, product labelling and green consumerism.* Palgrave Macmillan, London and New York.

Bourdieu, P. 1979. *La distinction critique sociale du jugement.* Les Editions de Minuit Paris.

Bourdieu, P. and L. J. D. Wacquant. 1992. *An Invitation to Reflexive Sociology.* University of Chicago Press, Chicago and London.

Brosius, J. P. 1999. "Green Dots, Pink Hearts: Displacing Politics from the Malaysian Rain Forest." *American Anthropologist, New Series*, Vol. 101, No. 1, pp. 36-57.

Carpenter, J. P., A. G. Daniere, et al. 2004. "Social Capital and Trust in South-east Asian Cities." *Urban Studies*, Vol. 41, No. 4, pp. 853-874.

Cohen, M. J. and J. Murphy (eds.). 2001. *Exploring Sustainable Consumption: Environmental Policy and the Social Sciences*. Elsevier, Oxford.

Dogan, M. 2002. "Disatisfaction and Mistrust in West European democracies." *European Review*, Vol. 10, No. 1, pp. 91-114.

Dogan, M. (ed.) 2005. *Political Mistrust and the Discrediting of Politicians,* International Studies in Sociology and Social Anthropology.

Douglas, M. and B. Isherwood. 1979. *The World of Goods: Towards and Anthropology of Consumption.* Basic Books, New York.

Estoque, M. A. and M. V. S. Maria. 2000. *Climate Changes Due to the Urbanization of Metro Manila.* Technical Report, Manila Observatory, Manila.

Garcia, R. A., F. Madegdeg, et al. 1994. "Household energy consumption survey in three Philippine cities." *Energy*, Vol. 19, No. 5, pp. 539-548.

Giddens, A. 1984. *The Constitution of Society: Outline of the Theory of Structuration.* Poliy Press, Cambridge, UK.

Green Army Network. 2010. *101 Ways to a Greener Lifestyle*. http://greenarmynetwork.net, accessed on 22 August 2010.

Gyberg, P. and J. Palm. 2009. "Influencing households' energy behaviour—how is this done and on what premises?" *Energy Policy*, Vol. 37, pp. 2807-2813.

Haribon Foundation. 2011. www.haribon.org.ph/, accessed on 7 January 2011.

Hertwich, E. G. 2005. "Consumption and the Rebound Effect: An Industrial Ecology Perspective." *Journal of Industrial Ecology,* Vol. 9, No. 1-2, pp. 85-98.

Høgsholm, F. M. (ed.). 2007. *In De Olde Worlde: Views of Filipino Migrants in Europe.* Philippine Social Science Council and Philippine Migration Research Network, Quezon City, Philippines.

IEA. 2009. *World Energy Outlook*. IEA-OECD, Paris.

Kliatchko, J. G. 2005. T*he First Integrated Marketing Communications Effectiveness Awards 2005.* Cacho Publishing House, Manila, Philippines.

Leiserowitz, A. 2007. "International Public Opinion, Perception, and Understanding of Global Climate Change." In UNDP, *Fighting climate change: Human solidarity in a divided world. Human Development Report 2007/2008,* UNDP Human Development Report Office.

Lovelock, J. 1972. "Gaia as seen through the atmosphere." *Atmospheric Environment* , No. 6, pp. 579-580.

Maniates, M. 2002. "Individualization: Plant a Tree, Buy a Bike, Save the World?" In T. Princen, M. Maniates and K. Conca (eds.), *Confronting Consumption.* The MIT Press, Cambridge, London.

Meralco. 2011. www.meralco.com.ph, accessed on 10 January 2011.

Miller, D. (ed). 2001. *Volume IV: Theory and Issues in the Study of Consumption: Critical concepts in the social sciences.* Routledge, London.

Milton, K. 1999. *Environmentalism and Cultural Theory: Exploring the role of anthropology in environmental discourse.* Routledge, London and New York.

Mother Earth. 2011. http://motherearth.ph/content/home/index.html, accessed on 10 January 2011.

Narberhaus, M. 2011. "Effective change strategies for the Great Transition: Five leverage points for civil society organisations." *Smart CSOs.* London.

NSO/DOE. 2004. *Household Energy Consumption Survey: Final Report*. National Statistics Office and Department of Energy, ISBN No. 971-562-664-5.

PhGBC. 2010. *Technical Manual: Building for Ecologically Responsive Design and Excellence (BERDE), New Construction*. The Philippine Green Building Council, Metro Manila.

Polanyi, K. 2001. *The Great Transformation: The Political and Economic Origins of Our Time*, Beacon Press, Boston.

Princen, T., M. Maniates, et al. (eds.). 2002. *Confronting Consumption.* The MIT Press, Cambridge and London.

Putnam, R. D. 2000. *Bowling Alone: The collapse and revival of American community.* Simon and Schuster, New York.

Reckwitz, A. 2002. "Toward a Theory of Social Practices: A Development in Culturalist Theorizing." *European Journal of Social Theory*, Vol. 5, pp. 243-263.

Republic of the Philippines. 2007. *Power Sector Situationer.* Department of Energy.

Røpke, I. 2009. "Theories of practice — New inspiration for ecological economic studies on consumption." *Ecological Economics*, Vol. 68, pp. 2490–2497.

Sahakian, M. D. 2010. "Combining Life Cycle Thinking with Social Theory: Case Study of Compact Fluorescent Lamps (CFL) in the Philippines." *Sustainability,* Vol. 2, No. 7, pp. 2349-2364.

Sahakian, M. D. 2011. "Understanding household energy consumption patterns: When "West is Best" in Metro Manila." *Energy Policy*, Vol. 39, No. 2, pp. 596-602.

Sahakian, M. D. and J. K. Steinberger. 2011. "Energy Reduction Through a Deeper Understanding of Household Consumption: Staying Cool in Metro Manila." *Journal of Industrial Ecology,* Vol. 15, No. 1, pp. 31-48.

Sanne, C. 2002. "Willing Consumers – or locked-in? Policies for a sustainable consumption." *Ecological Economics ,* Vol. 42, pp. 273-287.

Schatzki, T. R. 1996. *Social practices: a Wittgensteinian approach to human activity and the social*. Cambridge University Press, Cambridge.

SDC (Sustainable Development Commission). 2006. *I Will If You Will: Towards Sustainable Consumption*. Sustainable Development Commission, UK.

Shell Philippines. 2011. *Energy Saving Tips.* www.shell.com.ph/home/content/phl/products_services/in_your_home/gas_lpg/energy_saving_tips/, accessed on 10 January 2011.

Shove, E. 2003. *Comfort, Cleanliness and Convenience: The Social Organization of Normality.* Berg, Oxford, New York.

Sidel, J. T. 1999. *Capital, coercion, and crime: Bossism in the Philippines.* Stanford University Press, Stanford, California.

Spaargaren, G. 2011. "Theories of practices: Agency, technology, and culture, Exploring the relevance of practice theories for the governance of sustainable consumption practices in the new world-order." *Global Environmental Change,* Vol. 21, pp. 813-822.

SSC-CDM-PDD. 2009. *Makati South Sewage Treatment Plant Upgrade with On-Site Power, Version 4*. Manila, Clean Development Mechanism, Simplified Project Design Document for Small-Scale Project Activities.

Stern, P. C. 1992. "What psychology knows about energy conservation." *American Psychologist*, Vol. 47, No. 10, pp. 1224–1232.

UNDESA. 2010. *World Urbanization Prospects: The 2009 Revision, Highlights.* United Nations, Department of Economic and Social Affairs, Population Division, New York.

UNEP. 2011. *Green Economy Report. Part II - Investing in energy and resource efficiency: Cities,* United Nations Environment Programme, Nairobi.

Veblen, T. 1994 (1899). *The Theory of the Leisure Class*. Penguin Group, New York.

Warde, A. 2005. "Consumption and theories of practice." *Journal of Consumer Culture,* Vol. 5, pp. 131-153.

World Commission on Environment and Development 1987. *Our Common Future.* The World Commission on Environment and Development, New York and Oxford.

Weber, S., A. Baranzini, et al. 2009. "Consumers' choices among alternative electricity programmes in Geneva – an empirical analysis." *International Journal of Global Energy Issues*, Vol. 31, No. 3/4, pp. 295-309.

Wilhite, H. and L. Lutzenhiser. 1999. "Social Loading and Sustainable Consumption." *Advances in Consumer Research*, Vol. 26, pp. 281-287.

Zacaï, E. and I. Haynes (eds.). 2008. *La société de consommation face aux défis écologiques*. Problèmes politiques et sociaux, La documentation Française.